

Set in the future, in which you control a "Mauler" Assault Tank in one of 16 missions, in a war fought between two dominant races of the New World. Such are the defensive capabilities of the opposing armies that

any offensive moves must entail "behind the lines" actions performed by elite troops in specially designed vehicles. The Mauler is the latest such machine capable of being lifted in and

Ocean Software Limited · 6 Central Street
Manchester · M2 5NS · Telephone: 061 832 6633
Telex: 669977 OCEANS G · Fax: 061 834 0650

out of hostile territory and armed with the most advanced weaponry. Select your mission and the armoury you will require. The 360 radar sweep, in and out of cockpit views and area maps showing terrain, and complete

> theatre of operations, all combine to give a full picture of the battle as you strive for victory in a 3D arena where tactics go hand in hand with lightning reflexes and a true-grit determination SPECTRUM-COMMODORE-AMSTRAD IBM/AMSTRAD PC & Compatibles ATARI ST-CBM AMIGA



BRITAIN'S BEST-SELLING MAGAZINE FOR THE AMSTRAD ISSUE No. 72 SEPTEMBER 1991 Generate your own 3D universe with Domark's astonishing 3D Construction Kit. Read our special stepthrough feature SIZ:040,008,048 Start learning machine code today with AA's new Turrican, Rainbow Islands, Chase HQ, Altered Beast and X-Out — Ocean's latest compilation boasts four scorchers and a turkey. Find out which is which on page 34

CONSOLE/PLUS OWNERS -The new 6128 Plus and GX4000 console can't

load our covertape, but we can offer you a special money-off deal on the latest cartridge software. Check out the AA Special Offers section







MSTRAD ACTIO PTEMBER 1991

CTION TEST

- 33 BOOLY It's a

- 37 QUATTRO CARTOON The Co

PLUS...

39 BUDGET BONANZA! A whole ton o

SERIOUS

- 23 THE RAMBASE STORY 7
- 29 ASK ALEX
- 48 3D CONSTRUCTION KIT
- 54 FUN SCHOOL 3 over 7s Th
- **58 MASTERING MACHINE CODE**

REGULARS

- **52 SUBSCRIPTIONS**
- 55 CHEAT MODE
- 64 HELPLINE
- 65 SPECIAL OFFERS
- 66 AAFTERTHOUGHT A month's a long



3D CONSTRUCTION KIT



Domark puts Freescape power into your hands. Read our special three-page review and walkthrough guide



Chase HQ, X-Out, Turrican, Rainbow Islands and Altered Beast all in one compilation...

BUILDERLAN Check out this weird - but wonderful -French puzzler...

ACTION PACK



THE RAMBASE STO RAMBASE (on the covertape) uses the

6128's second bank of RAM to store its data. Author John Fairlie explains how



Robozone, Lightforce, Heavy on the Magick and a database for both 64K and 128K machines!

CODE

You got the assembler on last mont's Action Pack, now start learning how to program

Future Publishing Limited Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

Tel: 0225 442244 ● Fax: 0225 446019 ● Editor Rod Lawton ●
Consultant Technical Editor Adam Waring ● Staff Writer Frank
O'Connor ● Contributors Stuart Whyte, Phil Howard ● Art Editor
Paul Morgan ● Additional design Mary Anne Booth ● Wellingtons Chubbley Garden Centre ● Advertisement Manager Cheryl Beasley ● Publisher Jane Richardson ●

Promotions Manager Michele Harris ● Publishing Assistant Tamara Ward ● Group Publishing Director Greg Ingham ● Production Melissa Parkinson ● Subscriptions Christine Stacey tel: 0458 74011 ● Mail Order Claire Bates, tel: 0458 74011 ● Circulation Director Sue Hartley, tel: 0225 442244 ● Circulation
Assistant Kate Hodges

'YOUR GUARANTEE OF VALUE'



THE HIT SQUAD · P.O. BOX 350 · MANCHESTER M60 2LX

Amstrad CPC 464, CPC 6128, CPC 464 Plus

HOW TO LOAD THE COVERTAPE

oading the programs couldn't be easier! Type RUN" (followed by RETURN) and press a key to start the tape. (A shortcut way to get RUN" is to hold down CON-TROL and tap the small ENTER key.)

A menu screen will appear in a short time. Select the program you wish to load. Press SPACE to highlight the program you want followed by RETURN to load the program. Robozone, Lightforce and Heavy on the Magick are on side one of the

tape. The Datafile database is on side two. Turn the tape over and rewind to the begining to load this program. (Rambase II needs to be loaded from

Note that Datafile is loaded directly from BASIC with the RUN" command.

• If you have a disk drive connected to your machine you'll first have to type ITAPE to switch the machine to tape loading rather than disk loading. (The 1 is obtained by pressing SHIFT and @) The computer will load the next program.

LIGHTFORCE

again! Once more they're hell-bent on taking over the galaxy. And who's there to stop them? A Squadron of battlecruisers? An elite crack-group of space marines? A lone fighter, piloted by you? Yep, you've guessed it...

Things could be worse, though. You do happen to be at the controls of the most advanced fighter vet devised. You're a Lightforce fighter pilot. Those aliens won't know what's hit them.



• Red alert! Those beastly aliens don't know when to stop. Now they've taken over several planets. Looks like a job for muggins (again).

• Lightforce Controls

Press K for keyboard or J for Joystick. When keyboard is selected use the CURSOR KEYS to move and SHIFT for Fire.

Robozone Controls

where to go for more.

neat and tidy again.

Keyboard or joystick may be used.

Q	Jump
A	Duck
0	Left
P	Right
SPACE	Fire
н	Pause

ould you believe it? Those aliens are at it

They've taken control of several planets, and have secured them pretty well with attack craft and ground installations. Get your trigger finger ready - Lightforce is going in!



HEAVY ON THE

xel the Able just doesn't know when to A keep his trap shut. While telling rather tall tales about people he shouldn't, he gets chucked into the most dangerous dungeon he's ever seen.

Which is where we join him. It's your job to get him out. There are three separate exits. You have a book of spells to help you (and which you add to). You'll need your wits too, for there are many monsters and puzzles to overcome. Your journey is indeed a perilous one...

Your Attributes

On loading, values are generated for stamina, skill and luck. If you're not happy with the values you are initially given, option 6 will redistribute the numbers - note that this only juggles the figures around: you won't get all attributes higher!

When your stamina runs out you're dead. Combat reduces stamina a lot. Most other actions will also reduce it, but to a far lesser

The outcome of combat is affected by your skill and stamina levels. Luck influences virtually everything you do.

Stamina can be increased by eating and drinking. Other special objects can increase your Skill and Luck ratings.

Saving and Loading

Saving a game depletes your stanima, so don't rely on it as a way of getting round difficult problems! When restoring a saved game, you're asked for a Version letter, so make sure that you keep a note when you save the game.

Experience

The further you get in the game, the more your experience level will increase. Greater experience advances your Status and Magical

Combat

All combat is conducted through magic - physical contact with other creatures can be fatal. When engaging in combat it is wise to check both your own and the monster's Status before each round. A creature's Status often gives clues on how to deal with it.

Unlocking doors

Most locks that you'll encounter are magical and need magical keys to open them. Such a key may not be immeadiately recognisable, but need only be dropped by a lock to be effective. Other locks are opened by the use of passwords.

Communication

All communication is carried out in the middle window. All input uses the 'Merpish' language system, which works as follows:

All commands have a keyword, which is entered just as the first letter (occasionally two letters such as in North-East). Some keywords require an Object, whose name has to be entered in full. Commands can also be entered as a string, each seperated by a



When will it ever end! Those blasted aliens (well, monsters actually, but they're nearly the same thing) have taken over 'your' dungeon.

• The keywords are as follows:

N - North; E - East; S - South; W - West; NE -North-East: NW - North-West: SE - South-East: SW - South-West: L - Left: R - Right

- H Halt. This abandons the current command. and the rest of any command string
- Z A special funtion to swap the information in window 1
- O Return to option screen X (object) Examine object
- P (object) Pick up object

Tape Trouble?

We hope that your covertage will load first time. However, having worked with computers for as long as we have, we know that things don't always go like clockwork. If you have problems loading the tape, try the fol-

- Try loading at several different volume levels if you're using an external tape recorder. Computers can be very fussy about the volume they will load at.
- Clean the tape heads. This can be done with any commercially available cleaning kit. Alternatively, use a cotton bud soaked in alcohol. Gently rub the surface of the heads and pinch roller to remove that layer of accumulated grime.

D (object) Drop object

Spells

I (object) Invoke a named demon. B (object) Blast the object or monster. F (object) Freeze the object or monster.

Merpish object names

ASMODEE; ASTAROT; AXIL; BELEZBAR; BOOK; BOX; BOTTLE; LOAF; CANDLE; CHAIR; DEMO; MAGGOT; OBJECT; TABLE; WALL: MONSTER: SWORD: ROCK: SIGN:

Conversation is carried out as follows: "name, object"

The name is the name of the creature that you're addressing. The object is the demon, monster or thing that you wish to be attacked, or located, or require information about (which of those it is depends on the nature of the creature).

Adjust the cassette recorder's head alignment. The alignment screw is located just to the left of the tape head, and is usually accessible through a small hole. Rotate it a fraction at a time with a jeweller's screwdriver. When the crispest sound is heard, the alignment is spot on.

 Sometimes the tape spools can iam or stick at a critical moment. Check the spools in your cassette rotate freely, if necessary giving the casing a slight tap against a table edge just to make sure. If, after trying the all of the above, you still can't get the tape to load then you can return it for a replacement. Send the tape, along with an SAE to:

AA72 Covertape Returns, Ablex Audio Video Ltd, Harcourt, Halesford 14, Telford, Shropshire TF7 4QD.

here are two databases on the tape. The first, Datafile, is Public Domain and will work on all machines. Rambase II is a modified version and requires 128K and a disk drive. You will need to transfer it to disk before you can use it - follow the transfer instructions on the tape. Turn to our database feature on page 23 for the full story. AA



● Those confounded aliens! Now they've gone and taken over your Amstrad and turned it into a database! Don't they ever give up?

DISK DRIVE OWNERS READ THIS!

If you have a disk drive, you'll no doubt find the prospect of loading everything from tape daunting. Thanks to our special tape to disk transfer program, you'll only ever have to load from the tape once - all programs are transferred easily to disk.

Insert a blank formatted disk into the drive and the covertape at the start of side one into your cassette player. Connect the REM socket if you have one (6128 owners) it'll automatically stop the tape in the right places when accessing the disk drive.

Load the menu program in the normal way and select the TRANSFER TO DISK option. Follow the on-screen instructions and press a key when the computer asks you to. It's as simple as that!

Should you experience problems you'll be asked to rewind the tape and try again. Don't panic if this happens - follow the advice for tape loading troubles.

All three games on this month's covertape

are loaded by first typing: RUN"MENU

Then select the game you wish to load from the options given.

The database programs are loaded by typing:

RUN "DATAFILE RUN "RAMBASE

All the programs on the Amstrad Action covertage are easily transferable to disk. However, owners of the 6128 Plus are unable to connect a cassette recorder to their machines, and some of the rest of you may experience loading difficulties.

We've come to a special arrangement with our duplicators. For a small charge to cover costs, they will supply a disk contain-

ing all the programs we're giving away on the tape. If you would like a copy on disk, simply send them your name and address along with a cheque/postal order for £2.00 made payable to Ablex Audio Video Ltd. Send vour orders to:

AA72 disk offer.

Ablex Audio Video Ltd., Harcourt, Halesford 14, Telford, Shropshire TF7 4QD.

You may also order previous covertapes from issues 67 onwards - just make sure that your envelope is clearly marked with the issue number of the covertape you require.

Got a 464 Plus with a disk drive?

Users of these machines have reported problems transferring programs to disk. We reckon that we've solved the problem. However, if you have a modified machine and are still experiencing difficulties, let us know so we can investigate further!

опопопазь

• It's a dirty job, but somebody's got to do it.

Someone's gonna clean up this town. It's littered with pollution and filth, and we don't

mean empty crisp packets and Coke cans. The

city's overrun with aliens and mutants. As a

cleaning droid, it's your job to get everything

elbow grease to shift ths lot, though. So you're

armed with a laser spitting death canon - that

should shift the critters. They do fight back,

however, and you'll be glad of the power-ups

and energy replenishers that 'litter' the complex.

game. The full thing should be in the shops next

month, so if you finish this demo, you'll know

This is just the a single level of Imageworks'

You'll need more than a can of Mr Sheen and

The city is overrun with alien scum, and it's

down to you to tidy up after them.



Suppliers of Discount Software since 1984

HOW TO ORDER:

All prices include VAT & delivery Send cheques or postal orders made payable to:

MJC SUPPLIES (AA)

Unit 2, The Arches, Icknield Way, Letchworth, Herts, SG6 1UJ

Or telephone with Access or Visa debit and credit cards on:

0462 - 481166

Overseas Customers: write for quotation **Educational Bodies, Local Authorities, Govt.** Departments: send written order FAX US ON 0462 670301

AMSOFT CF2 **DISKS**

0	UR LOWEST EV	ER PRICES!!
5	for	£8.95
10	for	£15.95
20	for	£29.95

DESKTOP **PUBLISHING**

STOP PRESS SOFTWARE allowing text and graphics to be printed on the same page. Contains a number of text fonts & clip art. Create ONLY £34.95

STOP PRESS & AMX MOUSE As above but is supplied complete with the AMX mouse making the program a lot quicker and ONLY £64.95

EXTRA! EXTRA! Two disks of extra fonts and clip art ONLY £14.95

* * SPECIAL OFFER * * STOP PRESS SOFTWARE EXTRA! EXTRA! ONLY £44.95

STOP PRESS & AMX MOUSE EXTRA! EXTRA! ONLY £74.95

RIBBONS

Printer	1	2	5
DMP 2000/3250	.3.00	5.50	12.00
Panasonic KXP1081	.3.95	7.00	15.00
Citizen 120-D	.3.95	7.00	15.00
Star LC-10 Black	3.95	7.00	15.00
Star LC24-10	.4.95	9.00	18.00
Panasonic KXP-1124	.5.95	11.00	
Star LC-10 Colour	5.95	11.00	
Star LC200 Mono	5.50	.10.00	
Star LC200 Colour	10.95	19.95	
Star LC24-200 Mono	.4.95	9.00	
Heat Transfer Ribbons			

Citizen 120-D

AMSTRAD 6128 PLUS COMPUTERS

mstrads replacement for the CPC 6128 is now available with colour monitor £CALL with mono monitor £CALL

SERIOUS DISKS PROTYPE

	Arnor's excellent print enhancer must for all Protext users MJC PRICE £21.95	ris	a
-	Protext	18.9	95
	Prospell		
F	Promerge	16.9	95
1	Tasword 6128	23.9	95
1	Tasword 464 - disk (464/664)	23.9	95
	Faspell		
	Tasprint		
	Tascopy		
	Tasdiary		
	FasSign (6128)		
(Qualitas Plus v2	14.9	95

** LET'S GET SERIOUS ** monthly look at serious software This Month: The Spreadsheet This Month: The Spreadsheet A spreadsheet is a tool for getting the computer to perform lots of calculations. Change one value, and all others are re-calculated. This can simply be adding a column of numbers, or very complex formulae can be entered for a whole range of applications, from Bank Statements to statistical analysis. Our recommended spreadsheet for most uses is Matrix. Although it does not have the injuries that space, or the biggest that so foul! ggest data space, or the biggest range of built in hathematical functions, it is very easy to use and has good editing facilities, including the ability to sort whole blocks into order, and graphics.

ualitas CPM+ disk..... asterfile 3 (Database)

Feel free to telephone for advice on which spreadsheet best suits your needs.
Matrix Spreadsheet Plus £29.95
Next Month: The Database

Stockmarket (share analysis)	.29.95
Money Manager (home accounts)	.21.95
X-Press v2.0	
Sprites Alive!	.17.95
Sprites Alive! Compiler	.22.95
Power Basic	
Maxam Assembler	18.95
Mini Office 2	.13.95
Advanced Art Studio	
ColourDump 2	

3D CONSTRUCTION KIT CAMES DISKS

ı	GAMES DISKS
	MJC SPECIAL R.B.I. 2 BASEBALL RRP £17.99 Our Price £12.95 Offer runs from 1/9/91 to 30/9/91
	Back to the Future 310.9
١	B.A.T17.9 Chips Challenge11.9
ı	Dick Tracey10.9
	E.S.W.A.T11.9 Exterminator10.9
	F-16 Combat Pilot14.9
	Gazza 210.9
	Hydra13.9 Jehengir Khan's Squash10.9
	Lone Wolf10.9
	Lotus Esprit Turbo Challenge10.9 N.A.R.C11.9
	Nighthread 11.9

ince of Persia

ainbow Islands

IZ contains bad language

EDUCATIONAL DISKS

SEND SAE FOR THE M.J.C. SUPPLIES "EDUCATIONAL SUPPLEMENT" FOR MORE INFORMATION ON ALL

.14.95 .19.95

Ш	EDUCATIONAL PROGRAMS
Ш	Learn to Read with Prof
	Part 1: Prof Plays A New Game
	Part 2: Prof Looks at Words (4-9)
	LCL Primary Maths (3-12)
	LCL Micro Maths (11-GCSE) LCL Micro English (8-GCSE)
	LCL Mega Maths (A-Level)
	French Mistress 12 to adult
	German Master 12 to adult Spanish Tutor 12 to adult
	Italian Tutor 12 to adult
	Answerback Junior Quiz
	Factfiles (require Answerback (Arithmetic (6 to 11 years)
	I wild will out of to a a four of will

A 111 11 1C 1 22
Arithmetic (6 to 11 years)7.
Spelling (6 to 11 years)7.
Sports (12 to adult)7.
Sooty's Fun with Numbers
(under 7)11.9
Thomas the Tank Engine's
Fun with Words (under 7)11.
Full With Words (under //11.
[· · · · · · · · · · · · · · · · · ·
Fun School 1 10 programs per disk
For 2 to 5 years
101 2 to 3 years

ı	For 2 to 5 years
1	For 5 to 7 years
П	For 8 to 12 years6.95
П	Fun School 2 8 programs per disk
П	For 2 to 6 years8.95
ı	For 6 to 8 years8.95
ı	For 8 to 12 years8.95
1	Fun School 3 6 programs per disk
ł	For 2 to 5 years11.95
ı	For 5 to 7 years11.95
ı	For 7 to 12 years11.95

ACCESSORIES Programming the Z80 book23.9

DK1 64K Memory Expansion45.95 Multiface 2 Plus (for CPC's)39.95 Multiface 2 Plus (for Plus models) .42.95
AMX Mouse & Interface39.95 Advanced Art Studio & Mouse49.95 AMX Art software & Mouse59.95
KDS 8 Bit Printer Port19.95 CPC to Parallel Printer Lead9.95 Plus to Parallel Print Lead6.95
464 Keyboard-Monitor Ext Lead6.95 6128 Keyboard-Monitor Ext Lead .7.95 FD1 Disk Drive Lead (664/6128) .7.95 Monitor & Keyboard Dust Covers.7.95
(state colour or mono & whether 464/6128/plus) Quickjoy 2 Turbo Joystick

CPM BASED		
	Protext CPM	
	SuperCalc 2	42.95
	Arnor C Compiler Hisoft C Compiler Maxam 2 Hisoft Devpac 80 version 2 Nevada Fortran Compiler Nevada Cobol Compiler Hisoft Pascal 80 lankey Crash Course lankey Two Finger Typing	36.95 36.95 36.95 36.95 36.95 36.95

PRINTERS

FEEL FREE TO CALL FOR ADVICE

9 PIN PRINTERS

CITIZEN 120-D PLUS A cheap Epson FX compatible, with a range of text styles and sizes in draft mode, limited in Near Letter Quality. £139.95

PANASONIC KXP 1081 ell built and very reliable, offers all the is and effects of the Citizen 120-D, but offers NLQ in all combinations. £159.95

STAR LC-10 MARK 1 £169.95

PANASONIC KXP-1180 fers 4 NLQ fonts, and fast printing. Ver good quality text for a 9 pin printer. £179.95

STAR LC-200

est colour printer from Star. Not st but offers new paper handling Best value for money. NB: Printi £219.95

> 24 PIN PRINTERS When printing graphics from 24 pin printers results will be distorted without some extra software. Please call before ordering.

STAR LC24-10

Excellent value budget 24-pin printer, ering 5 letter quality fonts, and additionates such as quad size, outline and shadow £219.95

PANASONIC KXP-1123 £239.95

STAR LC24-200

The replacement for the popular LC24-10, with the same 5 letter quality fonts, shadow and outline effects. Much quicker than the 24-10 and has improved paper handling. £269.95

PANASONIC KXP-1124i handling and control panel. Now offers shadow & outline effects, 7 LQ fonts and a new super LQ font. £299.95

COLOURDUMP 2

COLOURDUMP 2 £12.95

CASSETTE SOFTWARE

ı	Fun School 1 (2-5) 4.95 Fun School 1 (5-7) 4.95 Fun School 1 (8-12) 4.95	
ı	Mini Office 29.95	١
	Maxam 464	1
1	French Mistress 12.95 German Master 12.95 Spanish Tutor 12.95	
ı	Answerback Junior Quiz7.95	



Te want your letters! If vou've got something to say, just jot it down and send it to us. We read EVERY letter sent in, even

if we can't print them all! Just a few pointers to bear in mind:

- Got technical problems? You should be writing to Forum, not Reaction.
- Stuck on the basics and need help? That's what Ask Alex is for.
- Keep your letters short, and try to make just one point rather than loads
- Looking for a particular cheat or poke? You need Cheat Mode!
- Don't enclose SAEs or ask for individual replies – there's no way we can manage that.
- Remember, you can write in about anything – piracy, sexism, the price of fish (eh?) – you name it. We want to make sure these remain the liveliest letters pages anywhere. The address to write to is: Reaction, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW. What are you waiting for?

Born again CPC-er!

Rection

Your mag is really terrific but I would just like to ask you a few questions. Firstly, I was reading about how Ubi Soft had cancelled the English version of Iron Lord (boo!) and then, a few pages later in the Turbosoft ad, there it was, in the Amstrad top-thirty hits section. Are Turbosoft selling the French version, or the English version? Please investigate this, as there are many fellow readers who want this fantastic game.



Amiga! Secondly, I really love your magazine and order it from the local newsagent every month. One day I found that my newsagent had missed out

ordering issue 65. I thought, 'not to worry, I can

order it as a back issue'. But I turned to the sub-

that it cost £7 to order a back issue! I usually only pay about £2.25 at the newsagent. Please explain to me why there is that gigantic price difference.

Thirdly (this is the good bit). I would like to tell you (if I haven't told you already) what a wonderful magazine you guys make. I used to be like Eric

Ellicock, and hadn't bought a decent game for years because I thought that they had stopped making them for the Amstrad. I was bored to tears with my collection of '1989' games. But then I saw your mag and, attracted by the Christmas covertape, I bought issue 64 and now I have Sim City and am waiting for Hard Drivin' to arrive. It was about the best £2.25 I have ever spent. Thank you so much, as I was about to spend my entire 10 years' worth of savings to go and buy an Amiga. You are the greatest!

P.S. This was written on Stop Press which I bought because of your mag.

Silas Palmer Australia

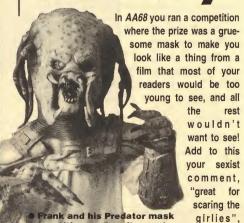
Rod: It's nice to know we've got fans over there, Silas! Sorry about the cost of a back issue, but these are sent out air-mail - which means you get them quickly and in the best possible condition. Incidentally, I spoke to our back issues manager, who looked up the airmail price and found it was now £6.03 - he's not charging enough!

There had to be a catch...

I love the Action Packs! The Ask Alex section is brilliant for us thickies and my BASIC has noticeably improved. The reviews are the best

Too nasty by half

rest



have a totally worthless page.

I then heard on the radio a program about what children read, which used this issue of AA as an example, quoting the competition for the Predator mask, it made me angry.

Anon.

Rod: Good grief, Mr Anonymous, where's your sense of fun? Many of our readers are too young to see Predator, but (a) they know all about it and (b) they can play the computer game!

"Great for scaring the girlies" was a joke - and I can't imagine anyone taking it any other way. It seems to me you're being more than a little bit stuffy about the whole thing.

By the way, we still haven't worked out whether Frank looks better with the mask or without it.



Card holders can order now on: 0462 481166





and you

Amstrad Plus points

At last! A magazine that acknowledges the existence of 6128 Plus owners. We now have the chance to get AA covertages on disk, and at a very reasonable price. I can't find a shop in my area that sells blank disks at £1,70, never mind disks with programs on. Well done, keep it up.

I hope you or one of your army of readers can help me with a couple of problems:

- 1. Why do documents that I write using Mini Office Il come out as shown in the enclosed example when I print them out after they have been saved to disk as an ASCII file?
- 2. Is it possible to get an AMX Mouse which fits the 6128 Plus? I recently went along to my local computer shop to purchase one of these highly desireable items only to find that, when the cartridge is installed (as it must be to use the 6128 Plus) it wouldn't fit.
- 3. Is Robot PD library still in existence? I sent a disk to them along with the requisite SSAE and 45p nine weeks ago and have heard nothing since.

Whilst on the subject of public domain, I thought you might like to hear some of my comments regarding a couple of these libraries. The four libraries I have used so far are Scull, Data, Penguin and Robot.

The first three are all very good, but Data PD Library is the one that comes out on top of my list. It is extremely fast - four days is the maximum time it has taken for a disk to be returned bulging with goodies, i.e. posted on Monday morning (about 9am) and back in my sweaty mitts by 7:45am on Thursday morning.

P.S. I don't agree with lain McCarthy about the presentation. It is great as it is - keep it up.

save for some reason, and that blocks 2, 3 and 4

had. Very strange! So, after hitting my head

against a wall, I composed myself and decided

that I definitely was not going to type all that

out again. Have you got any idea what went

wrong? If there is anyone out there who would

like to copy the program for me for a small

charge (a very small charge), could they contact

me at: 17 Stoke Road, Leighton Buzzard, Beds

send back the cassettes when you have copied

Congratulations again on a brilliant mag.

Rod: I'm mystified, Jerome. Just sounds like a

the listing. You have been warned!

And no funny business! I'm trusting you to

Andrew O'Hara North Yorks Rod: Er, the disk versions of the covertage aren't £1.70 any more but £2.00. There was a mix-up over the quotes we got from our duplicators and VAT wasn't included. Still, don't think of it as having to pay another 30p all of a sudden, think of it as paying 30p less than you should have done for a couple of months! Now, to answer your other ques-

- 1. From the look of your print-out, all the carriage returns have been lost. At the same time they seem to have been replaced by spaces. Saving text in ASCII form will eliminate carriage returns, but as for the spaces... without having a copy of Mini Office II to hand to try it out on, I can only guess - have you saved a document with a positive left margin? Does Mini Office insert spaces to produce text indents? It looks the sort of problem that's easily solved.
- 2. We had the same problem as you with our AMX Mouse! However, there does appear to be a very simple solution - what you need is a joystick-extender, a lead with a joystick plug at one end and a socket at the other. I've gone through the mail order ads in AA, and although I didn't see one advertised they do exist. Our sister magazine ST Format uses them to get over the abominable siting of the ST's joystick ports.

However, there is one other problem. I tried connecting our own AMX mouse to the office Plus using a joystick splitter, and - would you believe it - the power socket on the new machines is a differ-

It looks as if it's just a case of fitting a different plug to the mouse's power lead, though (we hope). 3. Robot PD, what have you done with this man's 45p? I don't have a number for Robot - perhaps someone else can help?

I've seen vet for the Amstrad, but maybe you bit of bad luck to me. Perhaps some kindly reader will take pity on you and send you a Now for the main reason I wrote this (oh ves. copy as you ask?

Oh, by the way, you might not want to bother. If you check out this month's Action Pack you'll notice an extremely spiffing little PD database which will run on vour 464...

We want more programming

Way back through the sands of time, well, April to be more precise, you finished your 3D programming section. It was very good, but what has taken its place?

Type-ins is helpful, but this does not really help teach programming techniques. I would like to see more basic programming features, perhaps dealing with simple strategy games or other graphics ideas

Hold tight, we are now entering the twilight zone. I think a machine code tutorial, each issue dealing with a simple idea like multiplying two large numbers, simple graphics, sound etc building into a machine code library would be a very good idea. I feel this would pay you off in the end, by improving the quality of type-ins and promoting the CPC as more than a games machine. Perhaps you could put these routines on the gap at the end of the covertape, in ASCII assembly language form (to load an assembler). or as a BASIC loader?

> Neil Stewart Bridgwater

Rod: Good heavens, this man's psychic! Last month's covertage had Hisoft's Devpac assembler on it in its entirely. And this month we're starting a brand, spanking new machine code tutorial section!

Yes, sir!

I write concerning a number of points:

- 1. Number of pages. Issue 68 has 92 pages. Issue 70 has only 68. Why has the number of pages gone down? Features are disappearing without warning, e.g. Free for All. AAfterthought, and some are smaller than before, e.g. Reaction, Ask Alex. Cheat Mode is also smaller, but did we really need six pages anyway?
- 2. The new budget games section. Firstly, it isn't in colour. You said that Action Test would be in full colour. Secondly, shouldn't the best games have bigger reviews, not necessarily the more expensive ones? The new section is OK for re-releases, but if a new Dizzy game came out, it would only get 1/3 of a page, but Lone Wolf got a full page purely because it costs £11 instead of £3. Why not have a section for duff games and re-releases? That way a page would not be wasted telling us that a game is rubbish.
- 3. Covers. Most of your covers are pretty dull. In my view, the best are colourful and cartoony ones, e.g. issues 70, 69 and 58.

 Amstrad covers are great, says Ben Wheal. No they're not, they're comic-like, says A S Moreton. What about the rest of you?

4. Covertapes. They are really good. My favourite games have been Dizzy (which I had already, but that can't be helped), Spindizzy and

- Balldozer. 5. Gane difficulty. The Dizzy games (you may have guessed by now that I like them!). Rick Dangerous 2 and Switchblade are about right, because each time you play you get further, and eventually you complete them.
- 6. Pokes. Why do people spend up to £20 on a game, use a poke on it to complete it and never

play it again? Most games can, in time, be completed without a poke.

7. I hope that you run a machine code series, continuing where First Bytes left off.

> Ben Wheal Worcester

Rod: The reasons for the smaller issue size are economic ones, I'm afraid. During the summer there's always a lull when advertisers take a break and companies bring out little new product. It would simply be uneconomic for Amstrad Action to carry on being 92 pages in those circumstances. Rest assured, though, that even though the issues might be smaller we do our best to cram them even more with information.

Sorry we can't put the budgets in colour for now - but when we first said all of Action Test would be in colour, the budget section hadn't been decided on. We don't propose to put every budget game in that section - particularly good ones may well get a (colour) page of their own. Sometimes we give bad games plenty of space just because they're big licences or major releases in some way. For example, we'd have given Turtles a spread even if it had been rubbish, because it was the 'big' game of the year. If a reasonably major game is no good, we take the trouble to spell

Thanks for your comments on covers. Interestingly, the ones you like are the ones other people complain about being too 'comic'-like We can't win!

As for the pros and cons of poking games, I think people only turn to pokes when they're just about fed up to the back teeth of getting nowhere in the game anyway, so they don't really lose out by it. A machine code series? Look no further than this issue!

Mr Cool

Yo. Dudes, where's your AAfterthought in last AA ish 70? That's the coolest part. Next. US Gold is supposed to have chilled out with Gauntlet III in April 1991, but no way has it been. And, hev. why say Mrs Holoway should easily be able to get a 464 Plus, whilst you couldn't even get a screenshot!

Your coolest fan Portsmouth

Rod: Don't worry about AAfterthought, it's back this month. What's all this 'chilling out'? Anyway, Gauntlet III got a going-over last ish. As for the 464 Plus business, are you being a bit cheeky? It's a bit hard to tell, really. Yo!

Too much like a comic?

I understand that you have to appeal to a wide audience, more so than any other computer magazine because of the versatility of the CPC. but recently the magazine has had more of the

appearance of a comic, with poor covers and the badly-presented review section. Please go back to the old-style review pages and spare us the cartoon drawings of staff and loud titles.

A S Moreton Plymouth

Rod: Any changes to AA really are due to the letters we get from the readers (we only print a fraction of those we receive) and what we can see happening in the CPC marketplace. I can understand people being upset when old favourites are changed, but sometimes it's what people want.

David gets a bite!

Regarding David Curry's request for a computer fishing game, Computing with the Amstrad and the March 1987 issue contained a type-in entitled Fishing. If David gives me his address I shall be pleased to send him the prog on tape.

P.S. After all your codding I'm sure eel be glad to get the game and, when he's had time to mullet over, he can wrasse-l with the problems until he's a dab hand at Fishing. Then there will be no need for him to carp again and he'll be grateful to huss. Obviously, he'd not been looking in the right plaice!

Aubrey Sinden, Church Cottage, Brede, Rye, East Sussex TN31 6EJ

Rod: That's enough fish gags - they're getting

STAFF WRITER

will be:

AMSTRAD ACTION

£ Salary negotiable - BATH

Are YOU three people rolled into one?

Amstrad Action, Britain's best-selling

magazine for the Amstrad CPC, Plus and

GX4000, needs a new Staff Writer to work at

its offices in Bath. The successful applicant

• A talented and creative writer. Have you

got that spark of genius that sets you

500 words with your application.

apart from the rest? You can prove it to

us by sending a sample game review of

• An Amstrad nut. Do you know - have you

played - just about every Amstrad game

in existence? Can you hold your own in

An excellent administrator. On a busy

BASIC? Do you know a PL1 from a hole

magazine there's mail to be sorted, calls

to take, letters to write, faxes to send-it's

A crafty cartridge cheat?

I have had a brilliant idea for how you can have a normal game with console graphics and speed. How? Well, what you do is buy an initial package contain ing a boot-up cartridge which will then access several ROMs, and when prompted you just insert the game disk designed for this system. After that you only have to buy a disk containing a game designed for this idea. The game disks should only cost around £10 at the most...

Grant Taylor Dunfermline

Rod: Hmm, yes, the trouble is Amstrad would go spare. The whole point of the cartridge set-up as it stands is that only cartridge games can use the enhanced graphics and sound, and Amstrad makes money from the sale of cartridges...

Also, the software publishers would be a bit peeved because one of the other key factors with cartridges is that they're much harder to pirate than disks. The other thing is, do you really need to use clever ROM tricks to access the



Ulure

- Launched in 1985
- Now over 200 staff
- Market leader in computer titles
- Exciting launch plans
- Britain's fastest-growing publisher
- 15 national newsstand
- magazines -Amstrad Action • New Computer Express Amiga Format • ST Format • Amiga Power Amiga Shopper • PC Plus • PC Answers 8000 Plus • Your
- Sinclair Commodore Format • Sega Power Classic CD
- Needlecraft Mountain Biking UK

Send your CV and a sample game review to: Lauren Evans, Human Resource Manager, at the address below.

in the ground?

a job in itself.

Future Publishing Ltd, Beauford Court, 30 Monmouth Street, Bath BA1 2BW Tel: (0225) 442244

I saved it and loaded it up to see what it was like. When I looked at it after the second-fromlast saving (are you still following me?) I was very impressed. When I saved it for the last time I thought I must have saved it all. However, trying to load it up later I found that Block 1 hadn't.

I knew there had to be a catch - ed). I have always wanted to have some serious software for my Amstrad, so when I saw the database in the Type-ins section of AA67 I jumped for joy. It took me a day to type it in and at various places

could fit more in

Jerome Turner

PROTYPE - THE RETURN OF ARNOR!

Did you think Arnor had developed their last CPC product?

We must admit, it was starting to look that way. But now we are pleased to announce a stunning new arrival -Protype. This provides Protext with the improved printing features that many of you have requested.

We honestly believe that it is not possible to achieve better quality output from a 9 pin printer than with Protype. Just look at the examples below - all printed on an elderly Amstrad DMP 2000!

Protype costs just £30 and is available on disc only. It works with Protext ROM and disc versions and may also be used as a stand alone program.

5 years after its original release Protext remains indisputably the leading CPC word processor. In the February 1991 issue, AMSTRAD ACTION said:

"Without doubt the most complete word processor available for the CPC ... Protext is very much a professional quality program."

O CPC464 & 64K expansion & disc drive

Fæder ûre, bû be eart on heofonum

Ar n-atheir, atá ar nèamh

Teve mūsų, kurs es danguje

Pater noster, qui es in cælis

Fader vår som är i himmelen

Uses less than 350 bytes of the main 64K.

Svargayehi vädasitina apagē piyāneni (Sinhalese)

Czech

Latvian

Polish

Turkish

AMSTRAD ACTION speed tests show Protext to be many times faster than other programs, for example:

Replace operation			Delete 17k b	lock
Program A - Program B - Protext -	74 s	secs	Program A - Program B - Protext -	15 secs

Prices

Protype	£30	(disc, Protext not required)
Protext + Protype	£45	(disc)
Rombo ROM box	£20	(when at least one ROM is purchased)

ROM prices		Promerge Plus	£20
Protext	£25	Utopia	£20
Maxam	£25	Maxam 1½	£20
Prospell	£20	BCPL	£20

Liquid^{293K}

(2) Acetone (C_3H_6O)

of faja pectoral castaña

(1) Acetic acid (C₂H₄O₂)

(3) Water_{sea} (H₂O, salts)

o con tres bandas en el pecho

just some of the non-ASCII symbols:

« » , " ' ; ; 1º 2ª ¶ §
© £ Y ¤ ¢ ½ ± ÷ × ↓ °

←→ # b B ð Ð b Þ Ø Ø

å Å æÆœŒł Ł d h H

— ←line graphics too→

 $c_{\rm p}/[{\rm kg^{-1}\,K^{-1}}]$

 1.96×10^{3}

 7.71×10^{3}

 3.90×10^{3}

Protype is a typesetting print enhancer designed to squeeze maximum quality from low-cost 9 and 24-pin dot matrix

This A Ganga común, «Pterocles alchata», 38cm printers. supports over 40 European languages including: paragraph shows Anglo-Saxon b ðæææāēīōūæææ how Protype can áčďéěíňóřšťúůýž work to a rightāčēģīķļņšūž hand margin.

ąćęłńóśźż This actual-size printout was áâçğıîösü produced in one operation on a 9-pin printer using Arnor's Protext and Protype.

Protype (disc only) works on: O Amstrad CPC6128 [+] O CPC664 & 64K expansion

(Old English)

(Irish Gaelic)

(Swedish)

(Lithuanian)

PROTYPE IS VERSATILE: • multiple diacritics (accents) with any letter (è ñ's Å)

• tabulates proportional text / micro-justifies spaces • 240 DPI × 216 DPI resolution on a 9-pin printer!

• works with all 9-pin or 24-pin Epson-compatible printers

• use from Protext, Basic or machine code

• includes the seven fonts used in this demonstration

• choice of character designs within a font (page or page)

mirror imaging of a line of text!

• superscript, sub script, underline, b box, (e) encircle

kerning (spacing of 'difficult' character pairs (AV)

Releasing your micro's potential...



Arnor Ltd (AA), 611 Lincoln Road, Peterborough PE1 3HA. Tel: 0733 68909 (24 hr) Fax: 0733 67299 All prices include VAT, postage and packing. Credit card orders will be despatched by return of post. If paying by cheque please allow 10-14 days for delivery.

Amscene

IT'S SHOW TIME!

The computer industry gears up as autumn approaches...

es, it's getting to that time of year. The build-up towards Christmas sees all the major manufacturers bursting into activity with tons of new product - we hope!

Make a note in your diaries for the 5th to the 8th September and the 1991 European Computer Entertainment Show, being held this year at Earls Court II.

The organisers are describing it a "the youth culture event of the year", and are expecting 45,000 visitors during the four days the show runs for. Make sure you've got some loot on you, though, because the admission charge is a pretty stiff £7.

And in the midst of all this glamorous gamesy stuff, let's not forget the next Computer Shopper Show. That's being held at the Wembley Exhibition Halls, Wembley Conference Centre between the 5th and 8th of December. This show's more for the serious user, with "displays and demonstrations of all the latest hardware, software and peripherals for all popular makes of home and business computers".

The organisers are expecting around 50.000 visitors this time and an estimated 260 exhibitors. Admission to the Computer Shopper Show is £6, so start saving those pennies.

Last to get a mention is the All Formats Computer Fair. The AFCFs may be at the bargain basement end of computing, but they've been successful enough to spawn venues in five cities this September/October, and the fairs are

Star LC10 replaced

Printer manufacturer Star's long-running entrylevel LC-10 model is to be replaced by a new machine, the LC-20.

The LC-20 is designed for exactly the same market as the LC-10 - small businesses, home users, education - and boasts eight NLQ fonts and printing speeds of 180cps in draft mode and 45cps in NLQ. The price will be around £235 including VAT.



perseded by the new LC-20.

now being held four times a year. There are no pretentions to grandeur, just loads of exhibitors selling at knock-down prices. Admission is £4.

The venues are: University of Leeds Sports Centre (Sunday, 1st Sept), Royal Horticultural Hall, Westminster (Saturday, 7th Sept), National Motorcycle Museum, Solihull (Saturday, 14th Sept), The Brunel Centre, Bristol Old Station (Sunday, 6th Oct).



• The All Formats Computer Fair is going from strength to strength - now at five venues.

Amstrad Action even more popular!

Amstrad Action's latest ABC figure for January to June 1991 shows a rise of 13% on the previous six months, and a massive 17% on the same time last year. Not bad when sceptics are claiming the 8-bit market is on the way out!

The magazine has only once posted a figure higher than the current 35,159, and the latest numbers prove that the CPC market is not just holding its own, it's actually showing an increase

All of Future Publishing's titles have shown a circulation increase. AA's sister 8-bit mags are doing well too, with Your Sinclair climbing 8% to 65,444 and Commodore Format turning in its first ABC and hitting 50,135, already ahead of its near-

"It proves the 8-bit market is alive and kicking," says Jane Richardson, publisher of all three titles. "If you think these figures are good, just wait 'till next time!"

Stateside 'sticks hit UK

Euromax is importing a new range of joysticks from American manufacturer Beeshu, and a pretty interesting (weird) bunch they are too.

Zoomer

This one's been knocking around a little while, but it's recently revamped following users' comments. It's terrific fun for racing and flying games, but it can be a bit tricky to keen it stuck to the Zoomer. to keep it stuck to the

table-top when you start getting carried away. Recommended Retail Price is £36.95.

Ultimate Superstick

What a corker! If you want arcade cabinet feel, this one delivers. Switchable left and right-hand controls and an Autofire that actually works • Ultimate Superstick RRP is £31.95.



on the Amstrad! - just like an arcade control pad (almost).

Hot Stuff

This one's not going to win any prizes, unfortunately. It's a pretty standard 'stick at a pretty standard £9.95. It's available in a nice variety of bright colours, but it's a bit tacky and creaky. • Hot Stuff... iffy.



SPECTRAVIDEO LATEST...

In the meantime, Spectravideo has another new joystick - but rather than looking like something out of a Stealth Fighter, the Gravis is extremely plain.

It's another American 'stick which apparently comes top in all the joystick surveys over there. The emphasis is very much on quality rather than sensationalism. "The Gravis speaks a word and the word is quality," quoth Spectravideo.

The Gravis has a full-size padded foam handle, an 8-position centering tension control and three independent Fire buttons. It also sticks to a table top "like electrons to the nucleus of an inert element." Good grief.

The price for all this quality? A stonking £40, though Spectravideo reckons that many users buy two or more 'ordinary' joysticks a year anyway.



 Quality talks, according to Spectravideo. For £40, the Gravis had better do som pretty fast talking...

SHINOBI DISK £7.99

DIZZY

CASS ONLY £7.99

Dizzy Fast Food

Dizzy, Fantasy

World Dizzy

izzy in Magicla

TAITO COIN OP ONLY £9.99

Legend of Kage

nly £4.99 Disk £10.99

ONLY £11.99

Operation Wolf

R-Type, Batman Caped

Crusader, Double Dragor

The National...

Wembl

Annals

Arnhe

Battle

Crete

Deser

Tank A

Vulcan

CASS ONLY

		<u> </u>
SPECIALS		
	RRP	SRI
3D Pool	9.99 .	3.99
A. P. B		
Australian Rules Football		
Black Tiger		
Brian Cloughs Football Fortu		
California Games		3.99
Continental Circus		
Crackdown		
Dragon Spirit	9.99 .	1.99
Dynasty Wars	10.99 .	2.99
E-Motion		
Ghouls 'n' Ghosts		
Hammerfist		
Hunt for Red October		
Incredible Shrinking Sphere .	9.99 .	1.99
Inheritance		
Laser Squad		
Man Utd		
Mr Heli	9.99 .	3.99
Outrun (original)	9.99 .	3.99
P-47 Thunderbolt	9.99 .	4.99
Passengers on the Wind 1	9.99 .	2.99
Passengers on the Wind 2	9.99 .	2.99
Pub Games	9.99 .	2.99
Purple Saturn Day		
Rick Dangerous	9.99 .	4.99
Shinobi	9.99 .	3.99
Sorceror Lord	9.99 .	2.99
Stir Crazy Bobo	9.99 .	2.99
Strider		
Time & Magik		
Tin Tin On The Moon		
Vendetta	9.99	3.99
War In Middle Earth		
Xenophobe	9.99 .	2.99

Basket Master, Supe Hang On, Track 'n' Field, Steve Davis Bnooker, Nick Faldo

CASS £12.99 DISK £15.99 Castle Maste iller, Total Eclips The Crypt SUPREME

ONLY £4.99 DISK £10.99 Elite, Ace, Sentine Starglider, Tetris

MEGA MIX ONLY £11.99 Dragon Ninia

O

PI

C

30 RED HOT HITS ONLY £7.99 Ghostbusters, FA Cup.

Agent X 2, Kane, LA Swat, Ninja Master Rasputin Ollie and Lissa, Ricochet, Zolyx Way of Exp Fist, Dan Dare. Formula 1 Simulator, Brian Jack's perstar Challenge, Tau Ceti, Park Patro Thrust, Harvey Headbanger, War Cars, Tarzan, Ninja Hamster, Enlightenment Druid II, The Boggit, Mystery of the Nile Mega Apocalypse, Endurance, Activato Catch 23. Dark Scentre

	AMST	RAD
	CASS	DISK
Back To The Future 3	8.99	12.99
BAT (Disk only)	N/A	18.99
3D Construction Kit	18.99	22.99
Chips Challenge	8.99	12.99
Cricket Captain	7.99	N/A
Dick Tracy	8.99	12.99
European Superleague		
Exterminator		
Extreme	7.99	10.99
F-16 Combat Pilot		
Gazza 2		
Gauntlet 3	8.99	12.99
Golden Axe	8.99	11.99
Gunboat (Disk only)	N/A	12.99
Hero Quest		
Hydra	8.99	12.99
Kick Off 2	7.99	11.99
Light Corridor	7.99	11.99
Loopz	8.99	11.99
Lone Wolf	8.99	12.99
Lotus Turbo Challenge		
Midnight Resistance		
Mystical	8.99	12.99
NARC		
70	Charles	

AMSTRAD CI	ASS	ICS
	CASS	
Airborne Ranger	10.99	13.99
Back to Future 2	8.99	11.99
Batman The Movie	7.99	11.99
Chase HQ	7.99	11.99
Colossus Bridge		
Colossus Chess 4		
Complete Games CTR	9.99	N/A
Cricket Master		
Double Dragon 2		
Dragons of Flame		
Edd The Duck		
Emlyn Hughes Int Soccer		
Football Manager 2 + Exp. k	(it .7.99	11.99
Football Director	7.99	N/A
Football Director II	N/A	13.99
Gunship	10.99	13.99
Heroes of the Lance	7.99	14.99
International 3D Tennis		
Klax		
Lords of Chaos		
Monty Pythons Flying Circus		
Multi Player soccer Manager		
Narco Police		
Nightshift		
Operation Thunderbolt		
Oriental Games		
Pipemania		
Pirates (6128 only)		
Puzznic		
Saint Dragon		
Silent Service		
Skate Wars		
Super Off Road Racer		
Toopage Turtles	0.00	10.00

ey Greyhounds	2.99N/A	Konix Sp
WAR GAN	MERS	Konix Na Pro 5000
t Battles	11.9911.99	Pro 5000
of Rome	2.994.99	Quickjoy
n	N/A11.99	Quickjoy
of the Bulge	9.9912.99	Quickjoy
1941	7.9911.99	Quickjoy
Rats	N/A11.99	Quicksho
ey Reb 2	N/A	Quicksho
ttack	6.999.99	Stingray.
	7.9911.99	Zip Stik

.7.99....

...N/A

101 30 11113		
	CASS	DISK
Navy Seals (cart only)	N/A	23.99
New Zealand Story	7.99	11.99
North & South	8.99	12.99
Pang (cart only)	N/A	23.99
Pinball Magic	7.99	11.99
Predator 2		
Prince of Persia	8.99	12.99
R.B.I. 2 Baseball	8.99	12.99
Rainbow Islands		
Rick Dangerous 2		
Robocop		
Shadow of the Beast	9.99	12.99
Shadow Dancer		
Sim City		
Skull & Crossbones		
Spiderman		
Star Control	8.99	13.99
Super Cars		
Super Monaco G.P	8 99	12 99
Swap	8 99	12.99
Switchblade		
Total Recall		
Toyota Celica G.T. Rally	8.99	12.99
Turrican 2		
Viz		
V 12		
	TVIIV	-
FORTHCO	OMING	

	ATTRAC		
		CASS	
	Adidas Golden Shoe		
	Apprentice	7.99	11.99
	Beach Volley	7.99	11.99
	Bonanza Bros		
	Builderland		
	Copter 271	8.99	12.99
	Darkman	8.99	12.99
	Driving Force	7.99	11.99
	Final Fight	8.99	12.99
	G-Loc		
	Hard Drivin 2		
	Iron Lord (disk only)	N/A	18.99
	Mega Phoenix		
	Mega Twins		
	New York Warriors		
	Panzai Kick Boxing		
	Player Manager		
	Quadrel		
	Skeet Shoot (cart only)		
	Sly Spy		
	Super Skweek		
	Suzuki Challenge		
	Tennis Cup 2		
	The Champ		
-	The Enforcer (cart only)		
	Thunder Jaws		
	Toki (cart only)		
	Z-Out	7.99	11.99
	Please note that the		
	forthcoming attraction		
	Almon and market day and	Th	

time of going to press. These will be despatched within 24 hours of release subject to availability.

JOYSTICKS

Cheetah 125+	6.99
Konix Speedking + a/fire	10.99
Konix Navigator	11.99
Pro 5000 black	
Pro 5000 clear extra	13.99
Quickjoy Jetfighter	11.99
Quickjoy Megaboard	
Quickjoy Superboard	
Quickjoy Topstar	
Quickshot Maverick	
Quickshot Python 3	
Stingray	
7i= Ctile	

Afterburner	14.99	4.99
A.M.C	14.99	4.99
Bloodwych	14.99	7.99
Colossus Mah Jong	14.99	6.99
Dark Sceptre	14.99	4.99
Dragon Spirit	14.99	2.99
Druid II Enlightenment	14.99	4.99
Fair Means or Foul (boxing)	14.99	5.99
Firezone	14.99	3.99
Galactic Games	14.99	4.99
Hammerfist	14.99	4.99
Hard Drivin	14.99	4.99
Hunt for Red October	14.99	6.99
Laser Squad	14.99	7.99
Monty Pythons Flying Circus	14.99	7.99
Ninja Spirit	14.99	4.99
Ninja Warrior	14.99	7.99
Passing Shot	14.99	2.99
Pro Tennis Tour	14.99	7.99
Purple Saturn Day	14.99	7.99
Running Man	14.99	4.99
Sentinel	14.99	3.99
Shinobi	14.99	7.99
Time and Magik	14.99	7.99
Tin Tin On The Moon	14.99	3.99
Toobin	14.99	3.99
Turrican	14.99	7.99
Tusker	14.99	3.99
Vendetta	14.99	5.99
X-Out	14.99	7.99
Xybots	14.99	2.99
Zombi	14.99	7.99

SPECIALS DISK

MIND-STRETCHERS CASS £9.99 DISK £13.99 Monopoly Scrabble

DISK £14.99

houls n Ghosts Strider, Black Tiger. orgotten World

PLATINUM

SOCCER MANIA

Disk £9.99

otball Manager Wor Cup, Gazzas Soccer Football Manager 2

DYNAMITE

Afterburner, Last Ninja II, WEC Le Mans, Double

Dragon

WORLD CUP Cass £4.99 Disk £7.99

Cluedo

SEGA MASTER MIX Super Wonderbo Crackdown, Dyna Dux, Thunderbla Turbo Outrun

TOLKIEN'S TRILOGY Lord of the Rings Shadows of Morde

CASS ONLY £4.99 Leaderboard, Leaderboard Class Leaderboard

30 MEGA GAMES PACK CASS ONLY £12.99

Karnov, Gee Bee Air Rally, Aliens, Super Hang On, Real Ghostbusters, Guadal anal, Firetrap, Knightmare, GFL Americar Football, Wonderboy, High Frontier, Inc. Shrinking Sphere, Supersprint, Prodigy, Basketball, Star Raiders 2, Explorer, Big Baskerbali, Star Halders 2, Explorer, Big Trouble in Little China, Mermaid Madness, Hacker, Ghostbusters, Spindizzy, Baseball Dandy, Rampage, Enduro Racer, Sailing, Space Shuttle, Barry McGuigan's Boxing, Howard the Duck

lease	charge	my /	Access/	V	isa	No:
-------	--------	------	---------	---	-----	-----

ase charge my Access/Visa No:				Expiry date:
DER FORM (ACCESS) (INCLUDING TO THE PROPERTY OF THE PROPERTY O		NAME:		
		TEL:	Post Code	

Please make cheques & PO payable to Turbosoft

Credit card orders taken payment cashed only on despatch. Orders under £5 add 75p P&P per item. For first class add 75p P&P per item UK only. EEC countries add £2.00 per item. Non EEC countries add £3.00 per item. Express airmail £4.00 per item. All items subject to availability All prices subject to change without notice. E. & O. E. Please remember Mail Order Companies may take 28 days to deliver from receipt of order. Please allow for cheque clearance.

GHOULS 'N' GHOSTS

SIM CITY Z THE THE CASS £6.99 DISK £9.99 Z HUR BOS THE CONTROL OF THE CASS £6.99 DISK £9.99 Z HUR BOS THE CASS £9.90 Z

CASS £3.99 + DISK £4.99

BACK IN AFTERBURNER

DISK ONLY £4.99

CASS ONLY £3.99

WAR IN MIDDLE FARTH

CASS ONLY £4.99

LASER SQUAD

CASS £4.99 DISK £7.99

TIME MACHINE

CASS £3.99 DISK £5.99

IN NOW WELLTRIS

CASS £7.99 DISK £11.99

SHADOW WARRIORS CASS £7.99 DISK £11.99

JACK NICKLAUS GOLF

CASS £4.99 DISK £9.99

GARGOYLE

GAMES

CASS ONLY

£4.99

Sweevo's World.

Tia Na Nog, Dun

Darach, Marsport,

Heavy On The

CASS £2.99 DISK £4.99

Maxam.

Tascopy

Tasdiary..

Prospell.

Masterfile 3 (664/6128)...

Sprites Alive Basic 6128.

Sprites Alive

Comp. 6128.

Tasspell

Hisoft Forth.

COMPLITER

CASS ONLY

£4.99

Devpac 80.

Mini Office 2

Tasprint 464.

Tasword 464

Tasword 6128...

VENDETTA

CASS £3.99 DISK £5.99

DISK ONLY £7.99

TURRICAN

CASS £4.99 DISK £7.99

TIME & MAGIK

CASS £4.99 DISK £7.99

THE CYCLES

CASS £4.99 DISK £7.99

3D CONSTRUCTION KIT

CASS £18.99 DISK £22.99

NORTH & SOUTH CASS £8.99 DISK £11.99

BAT (DISK ONLY)

£18.99

TEST DRIVE 2

CASS £4.99 DISK £7.99

COMPUTER

HITS VOL 3

CASS ONLY £4.99

Hun, Devils Crowr Wriggler, Dynamit Dan, Elidon, Juggernaut, Geof Capes Strongman Cauldron

NINJA SPIRIT CASS £2.99 DISK £4.99

Cass Disk

.14.99 19.99

11 99 14 99 ..11.9911.99

n/a 11.99

..11.9911.99

..19.99....23.99

...n/a......23.99

..n/a......18.99

18 99 ...n/a.....19.99

22.99

...37.99

..n/a.....37.99

...n/a......14.99

..n/a.....14.99

IN NOW

HEROES

CASS £7.99

DISK £14.99

Licence to Kill.

Star Wars,

Running Man, Barbarian 2

..n/a...

Mastercalc 6128.....n/a......24.99

Money Managern/a......22.99

Hisoft C Compiler 37.99 37.99

Hisoft Knife Plus.....n/a.....14.99

UTILITIES

EDUCATIONAL

ı		Cass	Disk
	Animal/Vegatable/Mineral	7.99	11.99
ı	Answer Back Junior		
	Better Maths 12-16		
	Better Spelling 9-14	8.99	13.99
	Biology 12-16		
	Chemistry 12-16	8.99	13.99
	Chemistry GCSE		
	French Mistress Adv. + Beg	12.99	14.99
	Fun School 2 Under 6	7.99	9.99
	Fun School 2 6-8	7.99	9.99
	Fun School 2 8+	7.99	9.99
	General Science	n/a	7.99
	Geography Quiz 10+		
	German Master Adv. + Beg	12.99	14.99
	Happy Letters	7.99	11.99
i	Happy Numbers		
ı	Happy Writing	7.99	11.99
	Magic Maths (4-8)		
ł	Map Rally	7.99	11.99
ı	Maths Mania (8-12)		
i	Physics 12-16		
Į	Physics GCSE		
ł	Prof. Plays a New Game		
i	Spelling Add On		
ı	Three Bears		
ı	Weather/Climate 12-17		
ı	Italian Tutor		
ı	Spanish Tutor		
	Fun School 3 under 5		
	Fun School 3 5-7		
	Fun School 3 7+		
ı	Sooty's Fun With Numbers.		
i	Thomas Tank Engines Words.	7.99	11.99

PRINCE OF PERSIA CASS £8.99 DISK £12.99

TWIN WORLD DISK ONLY £7.99 NOV AA RAVE 82%

DR. DOOMS REVENGE CASS £3.99 DISK £6.99

CF2 BLANKS INGLE £2.50 BOX 10 £18.99

TIN TIN ON THE MOON CASS £2.99 DISK £3.99

CLEANING KIT £3.99

GRAND PRIX CIRCUIT CASS £4.99 DISK £7.99

CASS £11.99 DISK £14.99

CASTLE MASTER CASS £4.99 DISK £7.99

£4.99

Zynaps,

Dynamite Dan

liens, Cauldro

2, Into The

Stunt Car Racer,

Super Ski

COMPLITER **FIVE STAR** VOL 3 CLASSICS CASS ONLY CASS ONLY £4.99 Trap Door, Tau Ceti. Tempest.

DISK ONLY £4.99 Moving Target Firelord, Strike orce Harrier, Wa Cobra Force, Of The Exploding Task Force

Oonalds Alphabet Chase.....8.99.....12.99

Mickeys Crossword Puzzler 8.99 12.99

ARCADE

BONANZA

VOL 2

Eagles Nest IN NOW HOLLYWOOD COLLECTION CASS £11.99

DISK £14.99 Robocop, Ghostbusters 2, Indiana Jones, Batman The **CHALLENGERS IRON LORD** CASS £11.99 DISK £16.99 **AMSTRAD DISK** Pro Tennis Tour. ONLY £16.99 Bomber. Kick Off.

ARCADE

BONANZA

VOL 3

DISK ONLY

£4.99

Dizzy Dick,

Eagles Nest

Football

Exclusively from Turbosoft (Stocks available mid August)

POWER UP CASS £12.99 DISK £15.99 Altered Beast, Chase HQ. Rainbow Islands

X-Out

Turrican

OF FIRE CASS £7.99 DISK £16.99

IN NOW

WHEELS

Chase H.Q., Powerdrift, Hard Drivin', Turbo Outrun

Turbosoft

Acacia Close Cherrycourt Way **Industrial Estate** Stanbridge Road Leighton Buzzard Beds. LU7 8QE

Monday to Thursday 9.00am to 8.00pm Friday 9.00am to 5.00pm Saturday 10.00am to 5.00pm (5 lines) Showroom hours are

Telephone hours are

Monday to Friday 9.00am to 6.00pm Saturday 10.00am to 5.00pm

All prices include VAT Tel: (0525) 377974 Fax: (0525) 852278 Independent Stockist.

Riomhaire Software. Dublin Bazaar Unit 34 Thomas St. Dublin 8, Eire. Shop prices will vary Personal callers only

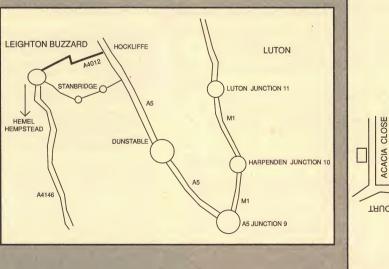
(Personal callers welcome)

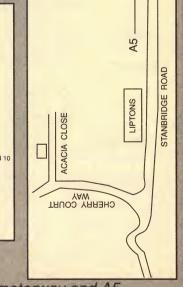
HOW TO FIND US.....

COMPUTER

CASS ONLY

£4.99





Maps showing direct routes from the motorway and A5



For Sale

AMSTRAD CPC464 FOR SALE. Very good condition, colour monitor, Multiface 2 and approx. £400 worth of games. Also joysticks available, selling for £300 o.n.o. Also Gameboy, 5 games, £85.00. Phone Jay on 061 941 1884.

AMSTRAD CPC464 with green screen + T.V. modulator, 30+ games, joystick, magazines, excellent condition £199 o.n.o. Also selling games, all originals, including Stunt Car Racer and Turrican, games worth over £300, will sell for £80. (0932) 346140.

CPC464, green screeen, modulator, Multiface 2, speech synth, light pen, 265 games, inc. F-16, Switchblade, 11 compilations, over 20 mags, 1 year old, £350 o.n.o. Contact Steve (0344)

THE HOME STUDY DISK. Software for educational and home office needs. Four programs with manuals on one disk for only £11.95. MJO Software, 45 Station Avenue, Tilehill Village, Coventry, CV4 9HR.

CPC464 colour monitor, disk drive, Multiface-2, 2 joysticks, lots and lots of software - wordprocessing, database, utilities, games, educational, v.g.c., £245. Seaford, Sussex (0323) 899423.

GAMES FOR SALE cassette only, not copies. For a list send s.s.a.e. to M. Guard, 7 Spillbutters, Doddinghurst, Brentwood, Essex, CM15 0LT. Also a CIM644 colour monitor for sale only £50. Ring (0277) 821247.

AMSTRAD DMP 2160 PRINTER MAN-UAL. Very good condition, £100 o.n.o. Phone Peter after 6.30pm 021-550 6146.

AMSTRAD 464 colour monitor, joystick, over £150 of good games which include all the Dizzy's (original), Castle Master, We Are The Champions and ThunderBirds etc. for £300. Phone 081-464 7405.

CPC6128, colour monitor, joystick, manual and AA magazines, over £250 worth of disk games, all top titles. All in excellent condition, price £300 o.n.o. Phone (0795) 429350.

DENMARK. Colour monitor for CPC6128. DMP2000 printer + 8 bit port + Qualitas. FDI disk drive. Rombo Rombox with Protext, Prospell, Promerge +, Utopia. CPC6128 firmware guide + other books, games, serious software + 3" disks. Tel: 98 18 35 64.

COMPUTER GAME POSTERS for sale. All different types and and sizes, prices vary. Send s.s.a.e. for price list to: Graham Milnes, The Bungalow, C/P School, Stockton on Forest, York, YO3 9UP.

CPC464, (tape driven), colour monitor, Quickshot joystick and £100+ of games, worth £400, will sell at £150. Excellent condition. Phone Rod (Ebchester) (0207) 282731 between 10am and 5pm. Monday to Saturday.

CPC6128, colour monitor, DPM3000, printer, Mirage Imager, AMX mouse, joystick, 110+ games worth over £1000, will sell all for £750 o.n.o. Phone Jason (0662) 245738 or 245550 (Northern Ireland).

AMSTRAD CPC464, monitor with MPI, plus joystick, over 100 original top arcade games (Leaderboard, WEC Le Mans, latest packages). Also 30 AA magazines, all for only £230 phone Helder on 071-837 7872 London.

CPC6128 colour, Rombox, ROMs, lots of utilities & games including French software. Sideways RAM, complete set of Nemesis software and much more. Superb condition £200. Julian on 081-346 2816.

EXCELLENT BARGAIN for first time buyer: CPC464 colour monitor, manual, protective covers, joystick, over *50 games, 2 years old, only £150. Phone Kevin (0635) 64043 anytime (answerphone) (Newbury).

CPC6128, mono, disk drive, tapedeck, Multiface II+, joysticks, 100+ games tape/disk, Advanced Art Studio, Sprites Alive, CPM Protext, manuals, excellent condition, worth £1000+ sell £500. Tel: Chris 6-9pm (0792) 462140 (Swansea).

AMSTRAD CPC464, colour monitor, over £400 worth of games, DMP2160 printer, speech synthesiser, lightpen, over 40 Amstrad Actions, worth £850, will sell for £425 o.n.o. Phone Steven 081-554 2530.

CPC6128 colour monitor, Stop Press + AMX mouse, Supercale 2, RS232 interface + Comm-star, utilities, music system, many great games, 2 joysticks, AA + ACU magazines £375. Phone (0376) 23123 after 7pm.

AMSTRAD GT 65 green screen monitor and/or MP2 colour-TV modulator for sale. Does anyone out ther have a Multiface II for sale? Contact Howard Gardner on 081-668 3916.

AMSTRAD CPC6128 colour monitor + Multiface II, data recorder, 2 joysticks, printer cable, lots of original games and utilities. Over 100 magazines, including some early AA mags + Amstrad books + AA subscription. Offers Graham 021-384 3429.

CPC664 colour monitor, joysticks, light pen, manuals, 130+ disks, tapes, games and serious. Cassette recorder, books, 60 copies AA including cover tapes. Soft157 basic specification. Good condition, £225. (0926) 640145 Warwicks.

CPC464 green screen modulator, DD1 disk drive, 64K memory expansion, Multiface, joystick, AMX mouse, £500+software, many on disk including desk-top publisher and cashbook, loads of magazines, £350 o.n.o. Phone 051-546 0577.

6128 PLUS, colour monitor, 4 months old, 3 years guarantee, 30 games inc. Switchblade, Turtles, Batman, dust cover, stand, magazines, all boxed, excellent condtion, £490. Telephone Simon (0703) 780162.

Wanted

SOFT 159 guide to CP/M. Bill (0400) 81931.

GAUNTLET ON DISK, original price paid, also any A.A.'s up to issue 29; cover price paid. Also Amstrad Book 1 Starting Basic and Amstrad Book 2, and The Amazing Amstrad Omnibus wanted. M. Straughan, 19 Church Avenue, Scotland Gate, Choppington, Northumberland, NE62 5SE.

BOOTSWITCHER FOR AMSTRAD 6128 (possible origin Strathclyde developments) ceased trading, or circuit diagram, or loan to copy from. Payment negotiable. Phone Wayne 071-430 5615 8.30am to 3.30pm.

SERVICEABLE CPC6128 keyboard lead and master disks, also cassette player if available, have manual. Phone (0722) 333937.

Services

PERSONAL HELP WITH CPC computer and listings, some from 1985. Enquiries from abroad welcome. Write to Angela Allum, P.O. Box 116, Bracknell, RG12 4PQ. (Add England if writing from overseas).

FIRMWARE ROUTINES: in need of a comprehensive list of routines for your CPC? Just send £3.00 cheque to S. Bennett, 42a Bury Old Road, Manchester, M25 5TL.

SPARES AVAILABLE for the entire Amstrad/Sinclair range plus other computer accessories. Send s.a.e. J. Hayward, 53 Ely Road, Cardiff, CF5 2JF or phone (0222) 554369.

BARD'S TALE PARTIES, includes Monk, Bard, Warrior, Hunter, Archmages. Excellent armour and weapons. Statistics all 18. Loads experience. Send blank tape + £3.50 to Ben Sizer, 6 Greave House Terrace, Lepton, Huddersfield, HD8 0DQ.

STUDY HOME COMPUTING or train to be a professional programmer. Correspondence courses. Contact Mrs. Hayes 081-890 0785 or write: 33 Grasmere Close, Feltham, Middx, TW14 9QW.

ZIRCON PD DISK. Includes utilities, demos, extra fonts and full featured database. Send £3.99 plus disk to: Jonathan Milne, Larchfield, Bakers Hill, Tiverton, Devon, EX16 5NE. Cheques payable to Jonathan Milne.



This section offers you a really cheap and effective opportunity to speak direct to 30,000 CPC owners – or would-be owners. Users report excellent results.

You can place an ad up of up to 30 words for just £5.

So you could use it to sell a printer, launch a user group or advertise a piece of software you've written. One thing you can't advertise is the sale or swap of software. Such ads can be misused by pirates.

Fill in the application form and send it to us together with payment. We'll place the ad in the next available issue (published 2-7 weeks after we receive your order) Make sure you include your first name and phone no.

Please place the following advertisement in the next available issue of Amstrad Action Name I enclose payment of £5.00 by Cheque/ P.O/ Access/ Visa Address Credit Card number Classification. Tick box: For sale Wanted Services User Groups Other

Write your advertisement here, one word per box. Include your first name and phone number.



The Atari ST is the perfect introduction to the world of computing. The power of the ST allows you to run "serious" applications as well as playing games, and the ST system is flexible enough to allow you to expand as you develop your interests and expertise in different applications.

With so much diversity and power it is easy to see why the Atari ST family is one of the most successful ranges of computers in the world. But best of all is the builtin growth potential. The 520ST user of today is the TT user of tomorrow; beginning with games or a simple word processor, anyone can learn about computers and gradually acquire the skills of the professional computer user. And unlike many other systems, an Atari upgrade is not wasteful. Much of the software available for the 520ST will run on both the Mega STe and the TT systems. With an Atari an upgrade means that you can add new capabilities and expand your computing horizons without losing everything you have acquired along the way.

If you thought that computers were all about playing games you've been missing out on the real potential that you and your computer have. To find out more about either the Atari ST or peripherals for any applications simply fill in the coupon and send it to Atari at the address below.



Whether you are looking for a leisure computer, an educational computer, a computer for all the family or a powerful business system, look no further than the Atari ST Range.

	send me more details about the Atari ST er products
NAME	
ADDRES	S
	POSTCODE
	Atari Corp UK Ltd, Atari House, Railway Terrace, Slough SL2 5BZ
	Compose Administration of the Compos

The ST is just the beginning



The power of the new Mega STe range makes it a serious contender for those who are after power computing. It is an ideal machine for the student or computer enthusiast who wants to run memory intensive applications such as Computer Aided Design (CAD) or graphics applications. The Mega STe features separate keyboard and central processor with a 1MB floppy disk drive and a 50MB Hard operating speed, which can be switched to 8MHz to run any you to upgrade.

For those of you who want to run a 'home office' with separate files for word processing, spreadsheets and accounts packages the Mega STe - with its vast amount of built-in hard disk storage - is an excellent choice. For those running graphics intensive programs the faster operating speed will make the Mega STe a much more productive machine. The Mega STe also features an extensive range of expansion ports that allow you to add even more power and

The portable Atari Stacy is completely compatible with all monochrome ST programs, but allows for complete

It features a supertwist backlit LCD mono screen, split horizontally and has all the standard ST ports. It is available in various configerations, with Hard disk as standard. It weighs approximately 15.2 pounds and has its own carrying handle making it easy to transfer from place to place. Because the ST, with its MIDI interface has become the accepted standard in the music industry, the Stacy is a boon machine for musicians with a busy schedule. Songs and sequences written at home can be stored on the built-in hard disk, then the whole computer can be easily transported to the studio or gig, with minimum stress, they can even be worked upon and improved on the road. Although it is the most specialist member of the ST family, the Stacy is still versatile enough to be used for all serious

The incredibly powerful Atari TT, at the very top of the Atari range, is the first in a new generation of high specification professional personal workstations based on the successful Atari ST standard. Similar in style and design to the Mega STe, the Atari TT features a separate keyboard, 1MB floppy disk, 50 MB Hard Drive and the same range of excellent expansion ports. The basic model comes configured with 2MB RAM which can be expanded up to a massive 26MB. With a Motorola 68030 central processor, the TT runs at up to 32MHz. But speed and power are not all the TT system offers the professional user. Six standard built-in screen resolution modes mean that there is always one suitable for the purpose that you have in mind. For animation or computer graphics, choose from a pallette of over 4,000 colours with the ability to display 256 on screen at any one time, and the exceptional 1280 x 960 pixel high resolution mode is one of the best screen modes available at any price.

Drive for data storage. The Mega STe features a fast 16MHz programs developed for the 520ST, making it even easier for



The Atari 520ST is an easy way for you and your family to learn about computers while having a great deal of fun. This best-selling computer has an impressive range of features that fit many requirements at home or in the office. A generous 512K RAM memory is included as standard enough to run large spreadsheets and databases as well as the latest generation of computer games. There are plenty of expansion ports available for printers, modems, monitors and hard disk, and other peripherals allowing you to increase the power and flexibility of your system as needed. MIDI expansion ports are fitted as standard. MIDI (Musical Instrument Digital Interface) is the music industry standard interface that allows you to control both recording and playback of synthesisers and other digital instruments with

professional quality desktop publishing packages.

The JLATARI ST

There is no other computer range in the UK that can offer its users such a wide variety of software support, ranging from educational learning programs to 16-bit computer games to

More than just great games





THE NEVER **ENDING STORY**



• Never Ending Story 2 comes from Linel and jolly good it looks too!

few years ago, a German film, made on a small budget, had unprecedented success in cinemas all around the world. The film, A Never Ending Story, was a fantasy epic about the adventures of a boy in a magical kingdom.

The sequel hit the the-

and told of his further exploits in fairvtale this land.

The game looks all set to be something of an enic itself, featuring six distinctly different sections, including

shoot-em-up, a 3D section, a platform game and some narly parallax scrolling.

The game features all the best elements from a fairytale, including a dragon, a wicked witch and a beautiful princess. We wait with bated breath.

> Extra weapons can be picked

up and the

pieces of dis-

membered

body flying around

add to the general

atmosphere of

chaos. The body

count is high, the

violence extreme.

Can you cope?

SMASH

mash TV is possibly the most violent coin-op of all time. It's a complete rip-off of Robotron 2084, but seeing as Williams make both, they're probably perfectly entitled to rip it off. The game features carnage, murder and yet more carnage.

The arcade machine had superb graphics, brilliant sampled sound and two joysticks for each player. It's a fair bet that the Amstrad won't be able to duplicate any of these, but the concept is so simple that the game's programmers can't go far wrong.

The game is supposed to be a futuristic game show, where the contestant has to shoot his way through an army of marauding lunatics. The object of all this is to win cash and prizes, just like the Generation Game!



Smash TV was a great success in the arcades last year and these Commodore shots give some idea of the graphics.

he Simpsons are Springfield's

most unsuccessful family and Sky TV's biggest asset. Matt Groening's family of complete losers features some of the funniest cartoon antics of all time.

Ocean has acquired the rights to the game and with not a little



The aliens planned to make super weapons the purple objects, but even if you super weapons from all but even if you stop them, they'll make one from hats and exit signs instead (seriously). The game looks absolutely superb and takes advantage of the inherent wit of

objects from the town. Um, yes. Bart Simpson has spotted an Alien nvasion, it seems, and has decided

to halt it single-handedly.

"Whoa mama!" as Bart Simpson would say. The game is a platform romp, with lots of hidden features and some of the weirdest tasks you ever saw.

like Bleeding Gums Murphy and Marge Simpson, the woman with the tallest hairdo in Springfield.

Look for your favourite characters,

lso coming from Ocean is the game of the movie Hudson Hawk. This Bruce Willis vehicle didn't exactly take the world by storm when it was released this

year, but the plot is perfect material for a game.

the Simpson family.

Bruce plays an ex con who's blackmailed into stealing just about everything Leonardo Da Vinci ever did. There are lots of explosions, lots of guns and lots of car chases. There are also lots of songs by Bruce Willis, but fortunately, these won't appear in the game... phew!



THERE'S PEOPLE N MY SHOES!

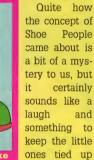
remlin has licensed award-winning cartoon series The Shoe People. The Shoe People are, naturally enough, shoes with faces. The cartoon (for, er, younger children) features them and their adventures in Shoeland

The game is a kind of educational tool featuring various

School series, only with a greater emphasis on play. The cartoons are phenomenally popular with kids and it looks like the game will be too

The game will include all your favourite characters (never heard of them - ed), such as Trampy, Sgt. Major, Wellington and Margot.

> the concept of the licence. came about is Invaders has one of the weirdest plots ever. The mission now? To steal Earth sounds like a laugh and cows... Their planet has a shortsomething to keep the little ones tied up for a while (ho



ho ho)

nyone remember Space

Invaders, the Grandaddy

of shoot-em-ups? It's

back. It's bigger, better and even

game. It's been doing

the rounds in the

arcades for a few

those groovy

fellers at Domark

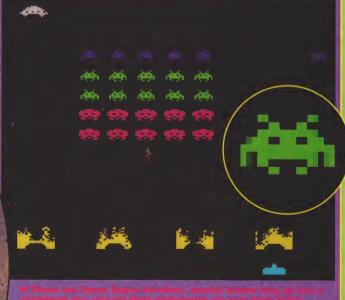
But Super Space

they're kidnapping ours. Th

It's up to you to stop the blighters, using your funky little spacecraft to blow

The sequel is a lot features extra The Amstrad version

believe it or not, is being ported from a Sega Master System and looks all set to be the funniest shoot-em-up ever.



nutants are highly dangerous lunatics and should be wiped om the face of the Earth.

u control a gigantic robot in this horizontally scrolling shoot-er The game itself looks a bit like old chestnut Trantor, but the



BLUES BROTHERS BLUES!

emember last month's Grapevine? When we reported on the Blues Brothers licence? Well we made a boo boo! We told you that Entertainment Inter-

national was releasing the game. Unfortunately, we were wrong. EI gave us a call told us off for ge ting it wrong. It is in fact a Titus license. Oops.

SPECIAL OFFERSS

NOW A GENUINE AMSTRAD
DISK DRIVE & INTERFACE
FOR YOUR CPC 464 AT
AN AFFORDABLE
PRICE!!

ONLY £89.99

COMPLETE INCLUDING COURIER DELIVERY SAVE OVER £60.00!!

6 DISKS
FULL OF
GAMES!!

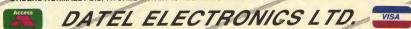
YES NOW YOU CAN TURN
YOUR CPC 464 / 464+* INTO A
DRIVE BASED SYSTEM WITH THIS
SUPERB AMSTRAD DD1 DISK DRIVE & INTERFACE.

- SIMPLY PLUGS INTO EXPANSION PORT NO MODIFICATION NEEDED.
- COMES COMPLETE WITH CONNECTIONS INCLUDING PSU.
- SUPPLIED WITH DR LOGO & CPM 2.2 ON DISK.
- *ALSO AVAILABLE FOR THE NEW 464+ PLEASE ADD £9.00 FOR ADAPTOR.
- LIMITED NUMBER AT THIS SPECIAL OFFER PRICE.
- SEND NOW FOR IMMEDIATE DELIVERY.
- PLEASE STATE WHICH COMPUTER MODEL YOU HAVE WHEN ORDERING.



HOW TO GET YOUR ORDER FAST!

TELEPHONE [24Hrs] 0762 744707 CREDIT CARD ORDERS
ORDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO....



GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND.
FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324



64K AND 256K MEMORY EXPANSION

- Simple plug in memory expansion gives instant extra memory.
- Features bank switching software for easy use by the programmer or for use as a data storage area. Ideal for use with the CPM 2.2 etc.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K. The 256K unit takes your 6128 to 320K!!
 64K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs
- designed for this unit (including OCP Art Studio see Ad.).

 Bank switching done automatically by software (cassette 464 disk 6128).

ONLY £49.99 64K FOR 464

ONLY £99.99
256K FOR 464 OR 6128 (PLEASE STATE)

THE RAM MUSIC MACHINE IS PROBABLY
THE MOST EXCITING MUSIC ADD-ON
AVAILABLE FOR ANY COMPUTER



 It's a full sound sampling system allowing any sound to be recorded digitally into the computer RAM.
 Once stored, the sound can be replayed at different pitches with many varying effects.



MUSIC MACHINE

- It's an echo chamber & digital delay line.
- Create some very interesting effects.

 It's a two voice music/sound synth.
- The Music Machine can also be used as a
- drum machine eight drum sounds are already provided for you, but you can easily produce more of your own.

 The extremely powerful software allows you
- to compose tunes from individual bars of music. You can edit your creations on screen & Save/Load sounds, instruments & rhythms
- Fully MIDI compatible. The Ram Music
 Machine supports full MIDI In, MIDI Out &
- MIDI Thru
- Output through your Hi-Fi or Headphones
 Comes complete with microphone.
- Use a full size MIDI keyboard to play the Music Machine.
- Sounds produced by the Music Machine can be mixed with a MIDI synthesiser's own sounds.
 On screen Sound Editor can produce MIDI
- data from your own compositions.

 Various sampled sounds are provided in order to get you going.
- No other product can offer so much in one unit it's the TOTAL SOLUTION!!

ONLY £49.99 FOR THE BEST MUSIC ADD-ON AVAILABLE FOR THE AMSTRAD

AMDRUM



- Now you can turn your Amstrad into a real Digital Drum Machine.
- AmDrum from Cheetah Marketing is a superb plug in device that produces "real" drum sounds via its unique digital system.
- On screen menu driven drum kit makes composing drum sounds easy for anyone to do!
- Just plug the output into your Hi-Fi, cassette player, etc. and that's it your Amstrad is a drum kit!!
- Comes complete with DrumKit Sound plus extra DrumKit and Kit Editor Program (worth

ONLY £14.99



SPEECH SYNTHESISER & STEREO SOUND BOOSTER

- This easy to use Speech Synthesiser includes a powerful Stereo Amplifier and two pod speakers which are an enormous improvement on the sound supplied by the internal mono speaker.
- Speech output is monorial but directed to both speakers. Booster gives stereo to computer internal sound output.
- Using the SPO/256 Speech Chip the unit has almost infinite vocabulary.
- Text to speech software is provided in ROM to make speech output simplicity itself.
- Voicing is transparent to the user and the computer can carry on with other program tasks as necessary.



ONLY £29.99

464 OR 6128 (Please state which)

<u>détronics</u>



LIGHTPEN/GRAPHICS SYSTEM

- Complete Lightpen and graphics system lets you create a whole range of effects on screen.
- It can magnify, shrink, colour fill and create circles, rectangles, lines and curves.
- Pictures can be edited at pixel level using a scratch pad which magnifies to full screen.
- Picture storage and retrieval, and a pen calibration feature.
- Printer dump utilities for Epson/Amstrad printers supplied (on cassette).

ONLY £14.99 CASSETTE

OR £24.99 WITH SOFTWARE ON ROM - NOTHING TO LOAD 464 OR 6128 (Please state which)

HOW TO GET YOUR ORDER FAST?

TELEPHONE [24Hrs] 0782 744707 CREDIT CARD ORDERS

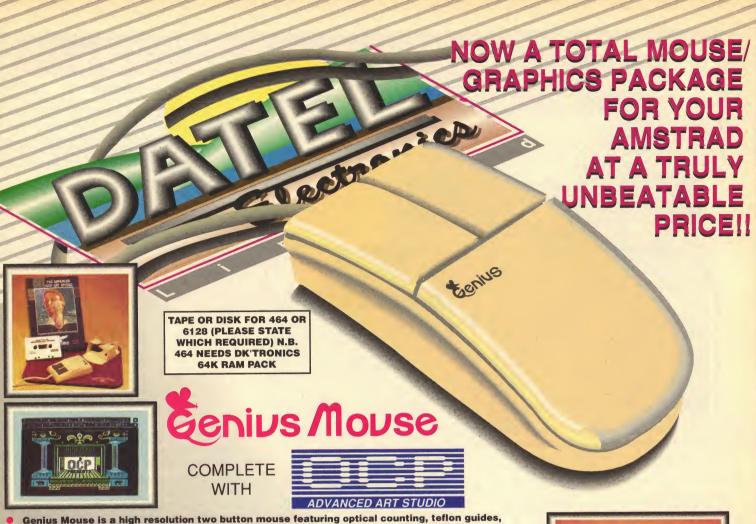
ORDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO....





FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324

AM



- Genius Mouse is a high resolution two button mouse featuring optical counting, teflon guides, microswitches, rubber coated ball and high quality interface.
- When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...
- Create an image shrink it, expand it, move it, rotate it, copy it, colour it, etc., etc.
- Spray patterns or shades, make elastic lines stretch and manipulate shapes.
- Zoom in to add detail in fine mode.
 Full cut and paste facilities plus excellent printer support.
- Pulldown/Icon driven menus for ease of use. Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes so flexible anyone can create superb graphics easily.

COMPLETE WITH MOUSE INTERFACE



The Genius Mouse Graphics System comes complete with the special Mouse Interface to allow super smooth control.

• Attractively styled to match your 464 or 6128 design and colour. Simply plugs into Expansion/Joystick port.

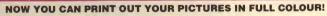
TOTAL PACKAGE INCLUDES GENIUS MOUSE. INTERFACE, OCP ADVANCED ART STUDIO PLUS FREE MOUSE MAT AND HOLDER

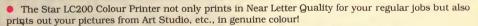


MOUSE MAT AND

MOUSE HOLDER (WORTH £12.99) WITH EACH PACKAGE

LC 200 COLOUR PRINTER PACKAGE





LC200 is a full Centronics printer so it works with other computers (Amiga, ST, etc.).

Made possible by Datel's unique colour printer driver - now you can have a hardcopy in up to 16 colours!! • No more to buy - just plug in and print!!

> PACKAGE INCLUDES... STAR LC200 COLOUR PRINTER RRP £299.00 CENTRONICS PRINTER LEAD RRP £9.99 DATEL COLOUR PRINTER DRIVER SOFTWARE RRP £19.99 NORMALLY £327.98 COMPLETE PACKAGE NOW ONLY £239.00

COLOUR PRINTER DRIVER AVAILABLE SEPARATELY ONLY £19.99

If you already have an LC10 or LC 200 Colour Printer we can supply the Driver separately.

HOW TO GET YOUR ORDER FAST!

TELEPHONE [24Hrs] 0782 744707 CREDIT CARD ORDERS

ORDERS NORMALLY DISPATCHED WITHIN 48 Hrs. ALL CHEQUES/POSTAL ORDERS MADE PAYABLE TO....



DATEL ELECTRONICS LTD.



GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND. FAX 0782 744292 TECHNICAL/CUSTOMER SERVICE 0782 744324 AMS MSE 3



RAMBASE

Tohn Fairlie wanted a database that stored all its files in the 6128's second bank of RAM. Starting with a rather good little public domain 64K database, DATAFILE, he developed RAMBASE, an ultra-rapid database for owners of 128K machines. (Both programs are featured on this month's Action Pack.) This is how he did it...

wrote RAMBASE because I wanted a program that used the second 64K of the 6128's memory. A database that only uses the first 64K is always a compromise between program facilities and space for data. RAMBASE is the solution.

• If you only have a 464, then you can't use RAMBASE. However, you can use DATAFILE, the 64K database that prompted me to write RAMBASE. This is the best 64K database that I have come across in the Public Domain.

Create New File

Alter/Delete Record Alter Field Names

Enter Record

Search File

Information Browse Files

Sort Records Label Printer

database file is to define the number of fields

Loaded Recs 9 B% RANBASE v2.1 Current Recd (
Maximum Recs 9 CREATE NEW FILE Free: 2178 File (NOFILE)

imum Field Length (1-62) :

Tabulate Records End Program

Save File Load File

For RAMBASE, I decided at the outset that the second 64K would contain only the record data. and that the field lengths would all be the same. i.e. the whole operation would be based on standard Bank Manager commands.

On the drawing board

The starting point was to rig up the menu screen. I rough out on plain paper what I want each screen to look like, then try and fit it on a piece of squared paper 25 rows x 80 columns wide, I amend this with pencil and rubber (impressive, eh?) until it looks about right,

Disc Utilities
Summate Records
Merge a File
Delete Records
Delete a Field
Add a Field
Change Field Length
Set Up Printer

adding boxes as required. I then write the program code, taking the LOCATE and MOVE coordinates directly from this squared paper.

Story

The menu is preceded with commands to set colours, mode etc. and followed by commands to input and act on the menu choice. I always add a program exit routine, and this resets the colours, windows etc to the Amstrad defaults.

Programs should really be written (we are told) by having everything as a GOSUB and a very small kernel which calls all the sub routines as required. I adopt this philosophy to a degree. Each menu selection is a GOSUB, and I have other GOSUBs for common requirements.

For each option on the menu I start by adding a REM statement to head up the sub routine, then a one-line print statement to say 'This will be the code to add data' for example. a CALL &BB18 to wait for a keypress, then a RETURN. This proves that the program is taking the necessary action on the selections made and returns to the menu after the action is complete. It also gives me a 'space' in the program for each sub routine.

The title bar at the top of the screen is drawn by a sub routine. This updates the title bar and clears the screen at the same time. I then call this sub routine from the menu choice sub routines as required.

 You'll have to supply your own copy of BANKMAN from your Amstrad's system disks - simply save it on the same disk as your RAMBASE files.

The bones of the program were then taking shape, with the 'look and feel' of the program becoming evident.

Enter Choice (A - U) • RAMBASE's main menu, offering every function you need to create, maintain and store your

Only Options A, G, H, M, N and U are Available until Options A or G are done

as a prompt for the right information when you come to type in records later... Loaded Recs 0 0% R H R B H S E V Z . 1 CUrrent Recd Enter a Name for Each Field - e.g. Name, Address, etc

• ...now you give each field a name. This acts

• ...entering information is easy. Once your records are set up just type in the info, press ing Return to go on to the next field.

name	: Ron Dod	gy Used Autos		1	_
address address	: 4b Gasw : Sludgep	gy Used Autos 65086754 orks Crescent itheath		ALCONO DE LA CONTRACTION DEL CONTRACTION DE LA C	e de la constante de la consta

Press (CONTROL) C to Copy Data from Last Record

Downwards compatibility

One of my primary intentions was to make RAMBASE compatible with the DATAFILE database that I had, which stores all data in an array in the first 64K. It was therefore the first task to write the Load and Save routines that could be proved with existing database files.

At this stage, programming in features is a bit of a chicken and egg situation. You have to do two or three options simultaneously before you can prove that all work satisfactorily. In my case, if a database file could be loaded into RAMBASE, then saved back to disk, and still be able to be read and proved with DATAFILE, then both the Load & Save options must be OK.

Most of my programming is done on paper, remote from the CPC, then typed in and debugged as a separate exercise. This means that I get it working in theory only at first, then if it appears to work OK when typed in, this is proof of the theory. If you just keep trying options at the keyboard until the code appears to function, it will be less structured and more difficult to change or debug

The Load File operation includes making all the strings read from the disk up to the full field length with spaces. The Save operation strips them all off again to save on disk space.

The Browse option involved all the calculations that are needed to place records centrally on the screen. This involves the derivation of four graphics coordinates for the corners of the box drawn round each record. These figures are calculated from the field length, number of fields etc whenever a file is loaded, or a new file created. The variables then remain unchanged until another file is loaded or created.

The Browse option involved more importantly. the derivation of the BANKREAD and BANKWRITE commands that take record and field numbers as their parameters. Bear in mind that BANKREAD is normally:

IBANKREAD,@r%,a\$,stringnumber

Here, r% is a number returned (that I have not used), and a\$ is the string read from the RAM, i e after the BANKREAD command, a\$ holds the data you wanted

If your database contained records of say, four fields, then stringnumbers 0.1.2, and 3 would be record 1, stringnumbers 4.5.6 and 7 would be record number 2, and so on. The standard commands needed were therefore:

IBANKREAD,@r%,a\$, (recordnumber-1)*numfields+fieldnumber-1 |BANKWRITE,@r%,a\$,(recordnumber-1)*numfields+fieldnumber-1

These commands have been used throughout the program in FOR/NEXT loops to process one or more records, i.e. with variables for the record and field numbers. The variable a\$ has to be set to SPACES(fieldlength) whenever it may have been shortened, i.e. after saving to disk, otherwise it stays the same length and is completely overwritten at each BANKREAD/WRITE

In the Create New File option the maximum number of records and other variables are calculated or reset, and the | BANKOPEN command issued to work in terms of the new field length.

I added a Free Bytes display to the status

bar so I could see how many bytes for program code I had left. This remains to no ill effect.

Marking your cards

During the programming I knew I didn't have to worry too much about making the code as compact as possible. I programmed each option to be simple and foolproof, even if it did mean

I soon gave up the concept of having 'marked' records. It was not viable to store a mark in the second 64K, and an array in the first 64K would have taken up too much space. Looking back now, each record would require not one byte to store a mark, but only one bit. Nevertheless, the programming would have been quite involved for someone who has promised themselves that machine code, (and poking values above HIMEM) is beyond the scope of mere BASIC programmers like myself!

The Search File operation uses the BANK-FIND command for simple searches. This has the advantage of finding occurrences of the required string in ANY field, but alas does not cope with multiple character wildcards. BANK-FIND allows a single character wildcard, so I kept to this as a compromise to start off with. and later added a wildcard search that has its operation based on the INSTR command.

The Output Options

The output options were the most involved, yet the most satisfying to write.

Typical database output is merely a print of all fields of all records, one under the other. Apart from using a ream of paper, this is next to

The Tabulate Records option is based on one line of output for each record and columns for each field. With a field length of, say, 25 characters, then it was plain to see that the width limitations of both screen and printer would soon be met. I therefore decided that each column need only be as wide as the maximum length of data it has to hold. So a field that merely contains a Y or N does not need to take up 25 columns of output width. The principle was therefore set. The user inputs the records to include in the output table, and then the fields for each column. The program then looks at each piece of data to see what width the column needs to be.

Data for field numbers, and maximum widths are held in two temporary arrays. 12 deep. Erasing these arrays after the print ensures that next time Tabulate Records is selected, they are re-dimensioned to all zeroes. The program makes use of this - it keeps printing columns until the next one has a number of 0. The maximum widths are used to TAB to at print time. Each of course has to be the total of the last value plus the current maximum width.

The only enhancement I made to RAM-BASE's Tabulate option is the inclusion of a Record Number which is optional.

The other output option (Label Print) is more conventional. Again, the fields, or blank lines, the user wants to include in each line of a label are held in an array. Along with optional field names, this output is more flexible, and hence more useful than other databases cater for,

Both my outputs can be to screen, printer or disk file - easily accomplished using the #stream numbers that CPC BASIC allows. AA

and all this happens in a nested FOR/NEXT loop for

By now, program space was becoming short.

My final option was to set up the printer by taking

codes from the user and sending them to the

printer. So the user inputs a string such as:

27 64 27 49 27 83 1

and the program splits this up into separate strings

for each number and send CHR\$ for that number.

three, and some one. I used INSTR to find the posi-

tion of the first space in the input string (in position

3 in the example above), LEFT\$ to isolate it, VAL to

change it to a number from a string, and finally

PRINT #8,CHR\$ to get it to the printer. I then used

RIGHTS to capture the remainder of the string, and a

loop back to process the next code in the same way.

Most codes are two digits, i.e. 27, but some are

IBANKWRITE the string

each field of each record.

How a database is structured

You can think of your database as being like a box full of record cards. In computing terms the box is a 'File'; each card is a 'Record'; each Record contains 'Fields' where specific pieces of information are entered.

atabases are extremely useful ways of storing

With a database you can not only organise the information efficiently, you can access it very

quickly, basically by 'searching' your records for

important business applications of computers.

his clients, perhaps - to vast and complex net-

works of terminals, all connected to a single

names, dates, objects etc.

information about people or objects or facts.

In fact, databases are possibly one of the most

They can range in size from a small system running

on one computer - a builder keeping a record of all

mainframe machine, as used by building societies

In the case of RAMBASE and DATAFILE, you start off by creating a New File. When you do this you are asked to enter the number of fields (the number of items of information you want on each record) and the maximum field length (if you make this no longer than necessary it cuts down on the final file size and the disk/RAM space it takes up). So if you were compiling a list of your friends' names, phone numbers and addresses, you'd need one field for their names, one for phone numbers and, say, six for their addresses (if you're going to put streets, towns etc on different lines.

How about the maximum field length? Well, how long do you think the longest line is going to be? 20 characters? Right, enter 20.

Next you're asked to name each field. This will give you a useful reminder when you come to input your records as to what goes where. Why not call Field 1 'Name', Field 2 'Telephone' and the rest 'Address'.

Once you've done that you go back to the main menu. Now you can start adding records. When you select this option the screen displays a blank copy of the card you've just created, on which you can type in all the relevant information. Want to enter another record next? Go ahead. Alternatively, you may want to save these records as you go along, in which case go back to the main menu and select the Save option before you continue.

When you Save, all the cards (records) you've typed in are saved as one file. When you Load in a File (again, from the main menu) the program copies in another batch of Records. So you might,

for example, have a file of all your friends' names and addresses and another (using a different style of card, maybe) for your collection of Amstrad games - how much they cost, when you bought them, what you thought of them and so on.

PROGRAMMING

Room in the RAM?

Where DATAFILE and RAMBASE differ is that DATAFILE is designed to work on machines with only 64K of memory, RAMBASE, however, uses the extra 64K of 128K Amstrads to store database files of any size in the machine's own memory, making it very much faster to use.

The options

BEGINNERS' CORNER

Both DATAFILE and RAMBASE offer lots of features, including the ability to alter existing records, change field names, search files for particular words, browse through your files, sort your records and print them out.

RAMBASE, however, does a few more things. Its Disk Utilities option lets you catalogue and erase files on your disks without even leaving the program. It will also let you merge files, delete records, delete fields and change field lengths in existing

Which files on the covertage?

DATAFILE works as a stand-alone program on both 64K and 128K machines, RAMBASE, however, consists of three different files: RAMBASE2.BAS (the program itself), RAMBASE.DOC (the Help file accessed from the main menu) and R2D2.BAS (a short program for those with two disk drives). You will also need to copy BANKMAN.BIN from the Utilities disks that came with your 6128 onto the disk, since RAMBASE uses this program.



 Running databases is possibly the single largest use for computers in business. DATAFILE/RAMBASE teaches you the basics of what they are and how to use them

RAMBASE2 – The Final Version

Having got all the essential features programmed in, I moved on to develop RAMBASE2. After all, the whole philosophy was that extra database functions could be added with no loss of space for record data. The unused area in main memory (15K at that time) was wasted as long as it contained no useful program code.

I already had a Save option that could save part of the file, but I needed the complementary function, i.e. to Merge load a file. I thought about files with different field names, and field lengths, as well as different numbers of fields. I decided that the original file characteristics must remain unchanged, including the default filename. I also had to cater for the

fact that there may only be space in the RAM for part of the merged file. In this case it would be helpful to merge as many records as possible, so that's what I went for. This option makes use of the fact that the CPC, while not having Random Access Filing, does allow you to read PART of a file in sequential mode. The field names, and details of field length etc. are all held at the start of the file. If merging is not proceeded with, the file is simply closed with CLOSEIN, and no harm done.

My next major addition was code to Delete a Field, Add a Field, and Change the Field Length. All, of course, had to be viable with data in the RAM remaining intact. For example, in the Add Field

option, all data has to be stepped forward in the RAM starting at the end of the file. I wanted to be able to add a field anywhere in the record, and not just at the

Changing the field length was similar in approach. When the new field length was shorter, we had to step through the RAM from start to end. and vice versa when longer. The fact that the RAM can be written using one field length, and read back using another is the vital key that allows this facility to be written. The method is simply to:

IBANKOPEN at the old length IBANKREAD the string IBANKOPEN at the new length

• RAMBASE lets you tabulate your records to ooth database and ordinary files, and erase files - all without leaving the program.

Loaded Recs 4 3% RAMBASE v2.1 Current Recd D Maximum Recs 132 IABULATE RECORDS Free: 1925 File ROD .DBF FINISH RECORD NUMBER Enter a number between 1 and 8 for each column required, (CR) when done

• RAMBASE lets you catalogue your disks for

Loaded Recs 0 0% RAMBASE v2.1 Current Recd 0 Catalogue .DBF Files Catalogue All Files Erase All .BAK Files Erase Specific File Return to Main Menu Use:- ↑ ↓ to Select, (CR) on Choice

• RAMBASE has 26 pages of on-line help, thanks to its accompanying text file, PAMBASE DOC

Loaded Recs 4 3% RAMBASE v 2 . 1 Current Recd 0 Maximum Recs 132 INFORMATION Free:- 1868 File ROD .DBF

• You can search all the records in a file via the Search command, accessed from the main

Loaded Recs 3 1% RAMBASE v2.1 Current Recd 0
Maximum Recs 273 SEARCH FILE Free: 1942 File ROD .DBF ENTER SEARCH STRING Use ? as a Single Character Wildcard, ie, ???Test

Wondering how to set your printer up to print those records? RAMBASE has a printer

Loaded Recs 3 1% RAMBASE v 2.1 Current Recd U Maximum Recs 273 SET UP PRINTER Free: 1926 File ROD .DBF * Cancelled After Print Run

Enter a Sequence of Codes, ie, 27 64 27 48, (CR) to Exit

ADDITIONS WELCOME!

I hope you enjoy using RAMBASE. I have left a small amount of space in case anyone wants to add their own specific routine. One I have kept separate so far is for use with two disk drives. If you write any useful additions, let me know, I may even knit them all together in an overlay file!

and their names.

FORUM

format now you can experiment with any 'big'

disk formats you might own. But remember,

you can only have one covertage per disk/side

parameters for any future covertapes, follow

these instructions. The poke will always be

&C2. Look for the letters 'DIS' in the program

"MENU. BIN" using a disassembler (the one

in AA69 works a treat). They'll be around

&8300. Note the address of the 'D' in

'DIS'. It's this number that

you use for the

poke i.e.

&82FA,&C2.

The CALL

address might

be different as

well so use one

Amstrad Action

has published to

find the entry point

of the program

"MENU. BIN" and

replace the CALL with

Hillingdon, Middlesex

Don't forget that you can

get disk versions of the

Amstrad Action cover-

Thanks for that little fix, Philip. Have a

voucher for your trouble! As I said before,

we'll try to sort out the problem, and let

you know if we get anywhere.

Philip Bowden

the new number, i.e.

the header

For those who want to work out the

as the program names are the same.

G ot any technical queries? Are you stumped by your computer? AA's very own technical wizard ADAM WARING will attempt to sort it out for you. Or maybe you want to pass on some tip you've discovered to the rest of us? (Send us a good 'un and you could be in line for a £25 mail order voucher!) Write to: Forum, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

ne second drive

I have lifted the curse I put on you after you altered your transfer to disk program. The reason for the curse was that I have a second drive that uses nice cheap disks. The new transfer program wanted to load everything off drive A. You may have noticed (drive B owners certainly will have) that there's a world of difference between saving a program to drive B and running a program from drive B. However, providing you don't alter your

transfer program again, I have the answer. First, use the transfer program supplied with the covertape to put all

files onto drive A. Then use your favourite file/disk copier to transfer all the files onto drive B (don't use any 'big' disk formats yet). Now type in one of the two short BASIC programs. The first program is for the AA69 and the second

for the AA70 covertapes. lem 124(b) solved! (At If the programs are saved least for issues 69 and 70...) as "DISC" then it makes it easy to run the menu programs:

10 REM Change AA69 menu to drive B 20 REM transfer all files to drive B

30 REM then run this program

40 MEMORY & FFFF

SO LOAD "MENII"

60 POKE &82FA,&C2

10 REM Change AA70 menu to drive B

20 REM transfer all files to drive B 30 REM then run this program

40 MEMORY &7FFF

70 CALL &80E8

60 POKE &831F.&C2

SO LOOD "MENU"

tapes anyway directly from our duplicators. For all the details, plus the address to write to, check out the Action Pack pages this Tape tribulations

I recently purchased an Amstrad 6128+ computer. I have had the computer converted by WAVE so that I can load software from tapes. However, I tried all methods I can think of to try and load the software package you supply with your magazine onto disk - it does not work!

Could you possibly supply a listing that will enable me to do this, or is it not possible to do

> J Botwood Wednesbury, W Midlands

Good Lord! Just when we thought it was safe! We reckoned that our specially commissioned fast loader on the covertape would solve all those horrendous loading problems, but it was not to be. It seems that the converted Plus machines simply aren't able to transfer the covertapes, though they load them without diffi-

We don't know why, but we're working on it. Hopefully, we should have the problem sussed soon. As a matter of interest, the commands | TAPE.IN . | TAPE.OUT. | DISC.IN and DISC.OUT are not supported on these machines, so we think that may have something

In the meantime, though, all I can suggest is that you buy the disks directly from our duplicators. They are available for the sum of £2.00 about as cheap as you get for blank disks. See the covertape pages for details of how to go about buying these disks, and the latest on the tape to disk transfer problems - we'll let you know just as soon as we've fixed it!

Know your rights

I have just written a program on my CPC and wish to sell it to other users. However, I am unsure of an important point. Is it illegal to display a copyright message in a program if it is not registered under the Copyright Act? Surely as the owner of a program I must have some rights!

If I were to enter the program into the Public Domain, could other users make slight changes to the program and then redistribute it getting all the credit?

Now to something completely different. Can you print a small routine which would allow me to use a flashing cursor?

Now back to PD for a moment. I wish all those readers who claim to run PD libraries would actually reply. I have sent off to a number of these libraries enclosing stamped addressed envelopes, and one or two have not bothered to

David Anderson Glasgow Anything you write is automatically your Copyright. You do not have to register it anywhere, and you are perfectly entitled to put any message you like in your program.

You can attach any rules you like to a program you place in the Public Domain. The common ones are that the program must not be altered in any way, and must not be sold for commercial profit. Any deviations from this rule should be stated clearly in the program or its accompanying files.

A flashing cursor, eh? Oh, all right then. I assume that you want it for entering a line...

1000 X\$="" X=1:LET Y=10

1010 LOCATE X.Y:PRINT "

1020 A\$=INKEY\$:IF A\$<>"" THEN 1050

1030 LOCATE X.Y:PRINT CHR\$(143)

1949 GOTO 1919

1050 IF A\$=CHR\$(13) THEN RETURN

1060 LOCATE X.Y:?A\$ 1070 X\$=X\$+A\$:X=X+1

1080 GOTO 1010

The program should be used as a subroutine and accessed with a GOSUB. It allows you to type in a string, with a flashing cursor as a prompt, and will return when you hit enter. Your entry is then stored in X\$. Posh, eh?

The majority of PD libraries do their damnedest to operate an efficient and useful service. Some, alas, don't 'play the game'. A pity, as they just waste everybody's time.

Expanding your horizons Datel Electronics do a 256K memory expansion

for the 6128. Having phoned them I have been told that two at a time can be fitted back to back in the expansion port.

Having got these two, could I still plug in and use my eight ROM Microgenic ROM board and EPROM programmer, or would I have to unplug one or the other? All of the ports are used, plus a Siren six ROM board hanging out the back. Would I have problems with bank

If not two memory expansion things, what about just one plus the rest of the stuff. Would I get it all to work?

> W Kinsman Rochford, Essex

Blimey! What do you want to do, run a power station? I don't think you'll have problems with bank switching, because ROMs are switched in a different way than RAM is.

To be completely honest, I couldn't guarantee that everything would work together, but I don't anticipate any problems - the only real way to find out is to try it.

Broken typewriter

The AA Toolbox program Typewriter does not work on my 464 Plus. Could you suggest any-

> Tristian Kidby Dagenham, Essex

When Typewriter asks the question 'Am I a 464 (Daft Question!)' answer 'no'.

The reason it asks the question is because of the differences in the machines' ROMs. However, all the computers in the Plus range **PCW Printing**

tion in the July issue of Amstrad Action, about using his Dad's 9512 printer on his 6128. He can't connect the printer to his 6128, but he can transfer ASCII text files (such as this letter) on to his dad's 9152 to print out. Here is

1. Prepare an ASCII file with the text you you want on it using *Amsword* or any other word processing program and save it to disk.

2. Start up Locoscript on the 9152.

3. Put the disk with the file on it in to the 9512 and select the 'disk change' facility.

4. Create a new document and select

5. Use the 'insert text' command and insert the text from the file you made on the 6128 into the newly created document.

(This letter was done in this way on my

Peter Fulton Hepworth, Norfolk

Thanks Peter. At least that should help with Richard's letter printing. If anyone has any suggestion for printing other things via a PCW printer, then let me know!

On to higher things

upgrade my CPC464 to the 6128 level. Looking at the advertisements, it would seem that there are a number of ways to add extra memory space, but I am not sure what would be the correct method.

Could you advise me, please what I should do to make the 464 able to operate 6128 programs. I have added a DDI-1 Disk drive.

Hove, Sussex

There are three things you need to 'turn' your 464 into a 6128. One of them you

have already - the disk drive is

The next most important thing is the memory expansion. You need an extra 64K to boost your machine to 6128 standard. Amongst others, the 64K expansion from Datel Electronics will do the job. The unit costs £49.95 and is available from Datel Electronics Ltd. Govan Road. Fenton Industrial Estate, Stoke-on-Trent ST4 2RS, Tel 0782 744707.

The memory expansion alone will make your machine compatible with a good many 6128-only programs. Advanced Art Studio, for instance, will work on a mem-

However, for even greater compatibility a 6128 ROM is required. There are a number of differences between the 464 and 6128 ROMs. Notably, the 6128 has several extra BASIC commands, so a program written for the 6128, even in BASIC, won't necessarily work on the 464. Prices vary for these ROMs depending on the supplier and availability; try WAVE, 1 Buccleuch Street, Barrow-in-Furness, Cumbria LA14 1SR. Tel 0229 870000.

Hope you get your beefed up machine up and running without too many problems!



 Your 464 can do everything a 6128 can do. All you need are the right bits and pieces. Add a disk drive, extra memory and a ROM upgrade, and viola!

use the updated 6128 ROM - even the new 464

Free for all?

I would like to ask you a couple of questions concerning the Public Domain.

1. Are demos of games, e.g. Total Recall, that appeared on the AA covertape public domain software?

2. Are the Type-Ins in your magazine public domain software?

Richard Wood

1. No! Don't assume that a program is Public Domain simply because it's been given away on our covertape. The software house which developed the program very much retains the copyright of any demos of games they have. If they give permission to put a program in the Public Domain, then it's a different matter. This has happened in the past, and Scull PD has several game demos in its books.

2. Yes, on the whole. We say that all programs printed in our Type-Ins pages are Public Domain, unless the author who submits the program specifically says not in a REM statement at the top of the program.

Group activities

I have a friend who runs a group activities club for single people of all ages. It has over 300 members and it is a problem to retrieve information. I suggested the 6128 might be able to do the job. Some things that it would need to do



Your July issue discussed the compatibility of our Multiface II with other hardware and software being used with Amstrad CPCs. You answers were, as always, very accurate, but I felt we could perhaps expand and sum up the

1. To the best of our knowledge, the Multiface can be used with any existing hardware and software. We do not say this to encourage piracy - may we take this opportunity to stress that the Copyright Act 1989 makes it illegal to reproduce or infringe copyright material without the clear permission of the copyright owner. Our concern is that the compatibility of the Multiface should never obstruct you from using your CPC to the fullest - and if anything, helps you get a lot more from your CPC.

2. The Multiface can remain attached at all times and can be made 'invisible' by pressing the red button followed by 'R' from the menu.

3. Making the Multiface invisible does not make it ineffective - the point is that the Multiface can always be activated, irrespective of whether or not it was made invisible. Just press the red button any time you like.

4. The only time the Multiface must be made visible is for it to re-load any program that has previously been saved with it. The Multiface is automatically made visible on switching on your CPC or by pressing the 'Reset' button.

Bear in mind that programs saved by the

- 1 Names
- 2. Address
- 3. Some details e.g. car owner, phone number.
- 4. Call up all members in a specific area
- 5. Call up/print out members overdue on subs and due to renew subs.

Can you confirm that the 6128 is up to this task and if there is a program, commercial or PD that exists to do the job.

> J Gamble Rowey Regis, West Midlands

What you need is a database - and spook!ily There's one given away on this month's cover-

As long as you set it up correctly, you should be able to get it to do all of these things. Follow the article on page 23 this issue to get the most out of Rambase II.

There may well be a more specialised database available that's been designed with looking after club memberships in mind. If anyone knows of one, or has written one for their own use then tell me about it!

Big disks

I have just typed in the Ultraform program in this month's AA and have some questions on the program.

Ultraform formats the disk to ten sectors. I have tried to use the disk in CP/M but continue to get the message 'disc not formatted or faulty'. Is it possible to adapt CP/M to ten sectors without the disk reformatted to 178K?

I have a disk that now fails to load or cat.

Multiface will not reload without the Multiface being attached - you can never pass on 'Multifaced' copies of anything!

If you need any more details, our technical department at 081 200 8870 will do our best to

> Alexander Goldscheider **Romantic Robot**

There you go, straight from the horse's mouth. Exactly what the Multiface is capable of. Thanks to Alexander and all at Romantic Robot for making the situation clear.



When verified using Disckit3 the message 'Disc error Track 0, Sector #00 - Data error within svstem track' appears. This disk contains some of my most important files. The only way I can CAT the disk is to press 'R' at the first 'Retry, Ignore, Cancel' and then 'I' at the second. Can

Is there any commercially available or PD program that formats disks to 1.4Mb for the

I want to use two joysticks on my 6128 but I haven't got a JY2. Is there a device available, or has anybody out there built one? I would be grateful as my local computer store say that they don't know of such a device.

Ranji Mistry Bradford

CP/M expects the disks it uses to be the standard 169K system format. It's very rigid about this, and won't take any nonsense with funny formats. I'm afraid that you'll have to stick to the normal format when using CP/M, unless anybody knows hetter that is

Your disk sounds very poorly indeed. It sounds as it the system track, which contains the program directory, is corrupted. Try and transfer all the programs you can onto a freshly formatted disk. Once you've salvaged your data, reformat the old disk - even then it might still information. Here's some good out those faulty switches for you.

advice: always keep a back-up of important files - otherwise you're just asking for trouble.

1.4 megabytes? That's a bit of a tall order! It's nearly ten times the specification that the disk drive is designed to work to. It's all well and good squeezing an extra 20K or so out of the system, but you'll never get an increase of that magnitude Sorryl

What you need is a joystick splitter. Check out our mail order advertisers to see if you can't

A joy to work

Back in the December issue (AA63), in Forum, I noticed an article called 'No joy with joysticks'. I decided to whip up a little program to help out.

10 MODE 1:PAPER 0: PEN 1: BORDER 0: INK 0,0: TNK 1.26: CLS

20 LOCATE 5.8:PRINT "JOY (0)": LOCATE 25,8: PRINT "JOV (1)"

30 WHILE INKEY(47)=-1;a=JOY(0):b=JOY(1):LOCATE 5,10:PRINT BIN\$(a,8):LOCATE 25,10:PRINT

This program enables you to check that your joystick switches are working correctly. To verify this, run the program and see if the bits

87654321 Rit no: 00000001 00000010 Down 00000100 00001000 Right. 00010000 00100000

Any combination will produce a binary image, e.g. Up and Right will give the combination 00001001. Readouts are given for Joy (0) and Joy (1) - should you be lucky enough to have a joystick splitter or JY-1 joystick. Press the Spacebar to finish testing.

E Clark Torrens, Australia

As well as showing whether a joystick is functioning correctly, the above also gives a good insight into how you can read the joystick from your own BASIC programs.



face of the disk rather than with the performing major surgery on it. E Clark's program checks

Ask Alex

Welcome to the section of the mag where I try to answer all those beginners' questions that aren't techie enough for Adam. And in case you've been wondering what happened to Ask Alex last month, I got my summer break at last! And yes I know you all missed me terribly, but I can't possibly go without my summer hols. But let's not waste any more time. Here's what found its way into the post-bag this month...

WHAT IS A' SPECTRUM PORT'?

WHAT IS AN ARCHIVER?

silver-tongued cavalier by the name of Mike Brown, who lives in Truro, Cornwall, offers this little gem to all new read-

"I have a tip for other beginners. For the ers of Amstrad Action: small sum of £10 send off for some back issues of Amstrad Action. Read these thoroughly from start to finish (including the adverts) and even though you won't understand some of the articles and letters the first time, you will gradually start to pick up most of the information you need as many of your questions will already have been answered in earlier editions

Hmm, Mike, a PR company couldn't have of the magazine..." made a better job of writing an advert for AA

onathon Farrel of Weymouth in Dorset

archiver in the Type-ins section of Amstrad

Action issue 65? If I bought a disk drive (I

have a CPC464) would I have to buy a

Multiface to copy tape software to disk or will

shops on 3-inch disks the same as those used

in the DD1 disk drive? I hope you can help

Well, Jonathan, an Archiver is a little util-

ity program which takes tape software and

transfers it safely to a disk. The process is

known as 'archiving' to disk - basically, copy-

ing to disk. Tapes are notoriously slow when

compared with other methods of backing stor-

age ('backing storage' is the name given to

storage devices such as tapes, floppy and

hard disks, CD-ROMs and so on). By using an

archiver program to transfer the programs to a

"Are the disk-based games bought in the

the archiver type-in do that?

writes: "What is an archive? As in

backs issues, but I'm not so sure that I should print such a blatant piece of ego massaging! Still, your heart's in the right place and it is a sound piece of advice.

Mike continues "Now for a silly question. What does Speccy port mean? I think it means crappy graphics, but why is it called Speccy

Nothing to do with the Spectrum, Mike, except in the sense that the software code has been 'ported' from the Spectrum to the CPC. 'Ported' is simply a word describing the transfer and conversion of existing software from one computer to another - alright? In this case, it usually means that the graphics are adapted from those on the Spectrum version.

disk, they will load much quicker and

Multiface is just another form of archiver

(with a few bells and whistles...) but one

which has been implemented using a hard-

ware solution rather than software. That is,

the Multiface uses special electronics to stop

the CPC and copy defined memory locations

to a disk. Archiver software does the same job

independent of the CPC, is a lot more capable

when it comes to stopping and copying soft-

Commercial games bought on 3-inch disk

will work fine with your CPC464 and DD1 (if

you buy one...) as long as they're intended for

use with the CPC. There are other computers

such as the Amstrad PCW range which also

make use of 3-inch disks. Check before you

Which is best? Well, the Multiface, being

almost always without error.

but without the electronics.

CAN YOU POKE GAMES

ust time for a quickie to close this month's section. Ian Whiteford of Ayrshire wants to know if "...tape pokes which are in the cheat mode book be of any use once the tape games have been transferred onto disk?"

They'd be fine, Ian. Pokes work by 'pushing' numbers directly into RAM memory locations thereby changing a game's parameters. Of course there's no header load with a disk, but you should be able to poke first

ISYOUR PRINTER " EPSON-COMPATIBLE'?

evin Hale is a young man from Haslemere, Surrey, and he's having problems with a Panasonic printer and Advanced Art Studio:

"I have a CPC464 with Panasonic KXP1081 printer and recently I bought the Advanced Art Studio on tape. When I have finished a picture I go to print it out, but the name of my printer isn't in the program. Instead, I pressed user-defined printer, but then it doesn't print. I would be very grateful if you could tell me how

to print because I need some pictures badly." Well, Key, user-defined printer means just that, you, the user, have typed in the correct sequence of control codes for the Panasonic KXP1081 (or whichever device you have), and the program is instructed to make use of them

in order to drive your printer. You haven't typed in any control codes and therefore the user-defined printer option doesn't work. Not surprising when you know why, right?

To get the Panasonic to reproduce your artwork requires fooling Advanced Art Studio into believing that the device is one for which it does have an entry in its printer list. Fortunately, that isn't too difficult. The Panasonic is what's known in the trade as Epson-compatible. Meaning that it uses the same control codes as an Epson printer, a company which sets the standards for dot matrix printers. Any software which provides a dot matrix printer option will also provide a an Epson driver to control it with.

Fire up the software. Make sure that printer is connected and on-line. Load a picture, and select print. When you're prompted for a printer driver select Epson (probably FX80 or LX80). All will be well.

Call us on: 24 Hour Credit Card Hotline 0902 25304



AMST	RAD 464/6	6128	COMPIL	ATIONS
2 Player Super League3.99	Nigel Mansell Grand Prix	ubutteoNew 3.99 eenage Mutant Hero	SIX APPEAL, Rick Dangerous, Twinworld, Puffy's Saga, P47 Thuricderbolt, Pick 'n'n Pile & Satan. Cassette £10.99	FISTS OF FURY Double Dragon 2, Shinobl, Dynamite Dux & Ninja Wamiors. Casette £10.79 Disk £17.50
Ace	Operation Wolf3.99 Outrun3.99 T	TurtlesNew 4.99 jurricanNew 4.99	4 MOST WARZONE Army Moves, 19 Boot Camp, River Rescue & War Cassette £3.99	CHALLENGERS Fighter Bomber, Pro Tennis Tour, Kick Off & Stunt Car Racer. Cassette £10.99 Disk £13.99
A.P.B	Postman Pat	I-D Construction Kit17.50 17.50 Airborne Ranger10.99 13.99 Back to the Future 37.50.10.99	QUATTRO COIN OPS Fast Food, Pub Trivia, Fruit Machine & Pinball Sim. Cassette £3.99	SOCCER MANIA Football Manager 2, Microprose Soccer, Football Manager World Cup Ecition & Gazza's Super Soccer Cassette £10.99 Disk £11.99
Barbarian 2	Pub Games	Battle of the Bulge8.99.10.99 Brian Clough's Football Fortunes7.509.99	QUATTRO CARTOON Little Puff, Ollie & Lisa 3, Wizard Willy & Frankenstein Jnr. Cassette £3.99	SOCCER SQUAD Footballer of the Year, Roy of the Rovers, Gary Lineker's Superskills & Superstar Soccer. Cassette £3.99
Boulderdash 1 or 4	Quattro Cartoon 3.99 Quattro Coin Ops New 3.99 Quattro Combat 3.99 Quattro Power 3.99	Colossus Bridge 48.999.99 Colossus Chess 47.509.99 Crete 19418.99 .10.99	MÜLTIMIX 3 Streetfighter, 1943 & Bionic Commando. Cassette £4.99	HOLLYWOOD COLLECTION Robocop, Indiana Jones Last Crusade, Batman the Movie & Ghostbusters 9. Cassette E.10.99 Disk §13.99
Bubble Bobble	Quattro Sports 3.99 Question of Sport 2.99 R-Type 3.99 Rambo 3 3.99	Edd the Duck7.50N/A Emlyn Hughes7.50.10.99 Emlyn Hughes	POWER UP Rainbow Island, Altered Beast, X-Out, Turrican & Chase H.Q. Cassette £10.99	WHEELS OF FIRE Hard Drivin', Chase H.Q., Powerdrift & Turbo Outrun Cassette £10.99
Championship Golf 3.99 Chuck Yeager 2.99 Chuckie Egg 1 or 2 3.99 Classic Printer 9.99	Real Ghostbusters 3.99 Red Heat 3.99 Renegade 3.99 Renegade 3 New 3.99 Rock Star Ate My Hamster 3.99	Trivia Quiz	THE WINNING TEAM A.P.B., Klax, Vindicators, Cyberball & Escape - Planet Robot Monsters. Cassette £10.99 Disk £13.99	SEGA MASTER MIX Super Wonderboy, Dynamite Dux, Crackdown, Turbo Outrun & Enduro Racer. Cassette £11.99 Disk £17.50
Commando	Rugby Coach3.99	Football Director 2 (128K)N/A .13.99 Fun School 3 (5-7)8.99 .11.99	ITS TV SHOWTIME Krypton Factor, Bullseye, Bob's Full House & Every Second Counts. Cassette £7.50	PLATINUM Strider, Ghouls and Ghosts, Black Tiger, Forgotten Worlds & L.E.D. Storm. Cassette £10.99 Disk £13.99
Cup Football	Sam Fox Poker2.99	Gazza 27.50.10.99 Golden Axe7.50.10.99 Grand Prix (D&H)7.50N/A	SYSTEM 3 COMPILATION Myth, Vendetta, Tusker & I.K.+ Cassette £10.99 Disk £13.99 COIN OP HITS 2	KARATE ACE Way of the Exploding Fist, Bruce Lee, Kung Fu Master, Avenger, Uchi Mata, Samural Trilogy & Way of the Tiger.
Dizzy Panic 3.99 Dominoes 2.99 Double Dragon 2.99	Shinobi New 3.99 Silkworm 2.99 Snooker Management New 3.99 Soccer Director 2.99	Gremlins 2	Ghouls and Ghosts, Vigilante, Hammerfist, Ninja Spirit, & Dynasty Wars. Cassette £10.99 Disk £13.99	SUPREME CHALLENGE Elite, Starglider, Ace 2, Sentinel, and Tetris Cassette £5.50
Driller	Soccer 7 3.99 Soccer Q 3.99 Soccer Star 3.99	Hydra7.50.12.99 Jack Nicklaus Golf7.50.11.99 Jahangir Khan Squash7.50.10.99	COIN OP HITS Outrun, Thunderblade, Road Blasters, Spy Hunter & Bionic Commando. Cassette £5.50	THRILLTIME GOLD 2 Airwolf, Scooby Doo, Battleships, Saboteur & Frank Bruno. Cassette £5.50
Football Champions	Spy v Spy 2.99 Spy Hunter 3.99 Steve Davis Snooker 2.99 Striker 3.99	Lotus Esprit Turbo Challenge	DIZZY COLLECTION Dizzy, Fast Food, Fantasy World Dizzy, Treasure Island Dizzy & Magicland Dizzy. Cassette £7.50	THRILLTIME GOLD 3 Commando, 1942, Spitfire, Combat Lynx & Deep Strike Cassette £5.50
Football Manager 2	Striker Manager	Manchester Unt. Europe	ORDER FORM AN All orders sent FIRST CLASS su coupon and send it Unit 4, BDC, 21 Temple Stree	bject to availability. Just fill in the to:- Software City at, Wolverhampton WV2 4AN.
The Games Summer EditionNew 3.99 Gary Linekers Hotshots3.99	Tracksuit Manager2.99	Ninja Remix7.50.10.99 North and South8.99.11.99 Predator 28.99.11.99	Name	
Gryzor	The Untouchables	Rainbow Island	Address	
ImpossamoleNew 3.99 Inspector Hecti in the Interchange	Wembley Greyhounds	& Cluedo	Previous customer Y/N	Tel No Reference No.
International Football	SOFTWARE CITY SPECIALS	Sim city	Name of game	Computer Value
Kenny Dalglish Soccer Manager	Deactivators	Grand Prix		
Lop ears	Kenny Dalglish Soccer Match (cass)	Total Recall		Postage
The Manager 2.99 Manic Miner 2.99 The Match 3.99 Matchday 1 or Ω 3.99	Match (disk) 3.99 Kinetik 0.50 Live and Let Die 1.99 Mega Apocalypse 1.99	New Price Blank 3" disks Amsoft/Maxell	POSTAGE RATES - Please add 50p for post at tries add £1 per item. Non EE	TOTAL nd packaging on all orders under £5. EEC coun- C Countries add £2.50 per item AA72 es payable to Software City
Mike Reid's Pop Quiz	Monty Python New 3.99 Mystery on the Nile 0.50 Question of Sport 2.99 Scrabble New 4.99 Shackled 2.99	1£1.99 5£8.99 10£14.99		EXPIRY DATE BURDPEAN ORDERS ACCEPTED

25 games in one issue! It can't be done! Yes it can - and here's just a few of them...



BUILDERLAND Loriciel





 Melba is cute, tiny and thick as two short planks. Stop him walking into disaster by moving the scenery around. Sounds easy? Ho ho ho...







ACCLAIM™ AND MASTERS OF THE GAME™ ARE TRADEMARKS OF ACCLAIM ENTERTAINMENT INC. THE SIMPSONS™ TM & © 1990 TWENTIETH CENTURY FOX FILM CORPORATION. ALL RIGHTS RESERVED.

BULDERLAN

LORICIEL ETBA

hose Frenchies have done it again. Just when you thought Loriciel had given up the ghost and shuffled off its mortal CPC coil, along comes another stonking little game. The game

tells the story of Melba, a typically cute little sprog who has to make his way across the treacherous regions of Builderland..

Builderland is weird. It is full of mysterious objects and bizarre villains. Melba, the hero, walks along in a straight line as the landscape scrolls from right to left. In his way are various obstacles. Melba isn't actually under your control at all - he simply trundles along of his own accord, picking up the odd bit of fruit as he goes.

Instead, you control a flashing cursor which can be moved anywhere on the bot-

tom two-thirds of the screen. The objects lying around on the ground can be selected with this cursor and moved anywhere you like. The objects you find all have specific properties and uses. And all of the objects you see have to be used in some way or another, even if it's just to get them out of Melba's way.

The objects include bricks (of several varieties), bombs, springs and a plethora of other thangs. The bombs, once picked up, are immediately primed and will explode wherever they are placed. They can be used to clear

across

through an immovable obstacle, or to kill any baddies vou come - bombs should be placed carefully, putting

one in the wrong place could spell disaster for and stick them together to build it. The bits are poor Melba, trapping, or even killing the fluffy

As Melba walks, the screen scrolls slowly along. Once he passes over an object you have placed, then that



object "dies" and can no longer be used.

until he runs out of energy.

down in time, he'll walk into the wall and stay there

This means you have to be extremely careful when and where you use objects. Golden bricks, for example, float in mid air and should be used

to bridge chasms and firepits. The metal blocks. on the other hand, fall to the ground very quickly and careless placement might just squash poor Melba.

Ramps are very useful - Melba can't even climb the smallest

hill and has to be assisted by these little metal wedges. That's the key to the whole game - using the various objects dotted around the landscape to keep Melba going.

The point of all this walking around is to deafeat the five monsters that inhabit Melba's land. These monsters, for some bizarre reason, can only be found in an as yet unbuilt house.

Melba's task is to find a pile of house bits



In the end-of-level nastie's house and a puzzle presents itself... how to kill the monster without actually shooting it

all found together and are assembled using the same method you use to place objects. When it's built, Melba walks through the door and faces

> The monsters - obligingly enough stand still and Melba has to drop things on them, Boulderdash style, to kill them. In the monster section, you will find little flames. When these are picked up, Melba can shoot supporting bricks and cause rockfalls. The puzzle element involves get-

ting all the rocks to fall where you want them to, at the same time as not wasting any of your bullets. When the monster's energy bar falls to zero he snuffs it - simple, huh?

Nope, it's not simple at all. Each inch, every millimetre of this game is a puzzle in itself and this has to be one of the trickiest Ammy games

What's more, the graphics are nice, cute and colourful, the sound decent enough and the presentation wonderful. This game is superb and presents a challenge that'll keep you going for months. Real

trank

FIRST DAY TARGET SCORE Defeat the first monster

BUILDERLAND VERDICT

ned, they suit the game perfectly.

Classy spot effects and cutesy jingles.

GRAB FACTOR...... 85% very addictive indeed.

STAYING POWER... 84% So hard and so addictive you'll be at it for ages.

Brilliant Lemmings variant with some really original features.

: (0) (0) (4)

LORICIEL E STBA

oolv is one of those quirky little French puzzle games that leaves you scratching your head at first and then monping the sweat from your brow later. The weirdest thing

7	Tor							1	10	, i	70		Inn	
الد الح	24					:			7		12.	ăI.	nu.	H
₹.			::	7	ı	낖	1			V.	1	1	Sec. of	2,6400.
									٦.			G.	4	8
	. 9		::	Y	a				1	i		î	DIT	MAG
				5	ď	24			Ť.	1			2	1
Y.F	T-F			귒		Ų,		1	1		7		DPE	\$14
2	2				F		ተ	1	٦,		120	3		A
	2			7	7	7	1	1	÷	5	7	1	0886	MIL
		H	-	-	ä	-	+	1	j.			1	ngh	SOU
		Lin	ve.	FT.	7		1			HE			1	JAC
ac	ROS		C					£a	100		3.00	0		ESET

Cut little devils - can you get them all the same colour?

You're faced with a board containing an arrangement of squares linked together. Each square can be changed to a different colour -

the idea is to make every piece on the board the same colour. On the first level that colour is grey. The problem is,

when you change a piece, you also change its neighbours... This can get very confus-

and thought about it..

Unfortunately, you have to play Booly up against a very

strict time limit. This really gets the pulse racing and on later. harder, levels the time limit is very tough.

The graphics in Booly are very nice, given the basic game concept. The artists at Loriciel have pulled out all the stops and given each level a diferent look.

Booly is a chalenging addition to the puzzle genre. It combines fierce men tal gymnastics with arcadestyle pressure, and yet the concept is simple enough to pick up in seconds.

trank



ing, but basically it's like a two-dimensional Cube. Each action causes a reaction. You have to figure out a way to cause reactions in such a way that the finished result is a board of one

It gets very tough very quickly. The squares can each be connected to up to four others... it would probably all be very easy if you just sat down

SECOND OPINION

doesn't take long to work out you've got to do, but a hell of a lot longer to actually do it! The plot's simple, but very nicely

FIRST DAY TARGET SCORE

BOOLY VERDIC

Reach the second level

quite varied.

SONICS..... Not really very much going on in this department.

GRAB FACTOR..... Instantly appealing and immediately frustrating.

STAYING POWER... Tons of boards and lots of evels mean bags of fun.

An infuriating puzzle game - simple in con cept but very nicely executed.



Oh dear, Melba built the house, killed the monster... and walked straight out of the

POWERUP

OCEAN # £15.99 cass

Power Up is the latest compilation offering from Ocean. The linking theme is arcade action - well, three of the five games are conversions of famous coin-ops, anyway...

hase HQ is a conversion of the brilliant Taito racing game. The game adds to the racing genre with a rather novel twist. Instead of bimbling around a race track, overtaking other racers and getting fast lap-times, you get to ram geezers off the road.

It's a Miami Vice type scenario. You are a cop and you're basically after some robbers (wow, that's new! - ed). At the start of each mission the robbers are miles away and heading for a life of sloth and debauchery on their ill-gotten gains. Fortunately, the police force has supplied you with a rather,



 Screaming along country roads as you head after the infamous drug dealer. His racy sports car is no match for your turbo boosters. Go Mr. Driver!

groovy Porsche 928. And the thing is fitted with an outrageously powerful nitrous oxide turbocharger.

Using the turbo gives an unfeasibly large burst of speed. You can use this to catch up with the crims, or to ram them off the road when you do catch up. Various obstacles mess with your happy thoughts, though, as you tear through the streets, including cardboard boxes, stray fences and rolling tumbleweed. These all slow you down (but not as much as a collision with an inno-

The graphics are superb – the road is particularly convincing. The gameplay is amongst the most entertaining of any game in the racing genre. One of the best driving games on the Amstrad and a brilliant conversion of an ace coin-op.



Rainbow Islands vou control an enormously cute character leaping from platform to platform. Your task is to save

several islands from some diabolical fiend (also cute). You have at your disposal the most awesomely dangerous weapon known to man... a rainbow (hence the name).

The rainbows are used to dispatch enemies. To do this, you fire so that the rainbow traps any cute monster in your path.

You can also walk on the rainbows to reach otherwise inaccessible platforms.

You have to reach a goal at the top of every level. It's a bit of a race against time. If you hang around too long, you will be

Scattered around each level are a variety of bonuses and power-ups.

These include potions endow ing the player with double, even triple rainbows. You can also pick up boots, speedy enhancing both jumps and speed.

There are lots of secret bonuses to discover, too. The game is a joy to play and the excellent graphics and sound add to the presentation no end. A real little corker.



drowned as water floods the levels Who violence here as you bounce through the Rainbow islands. Cute monsteres hamper your progress everywhere you go so hit them with those stars.

ntergalactic murder and mayhem is the order of the day in the ace Amstrad version of the classic Rainbow Arts shoot-em-up. The game received the ultimate accolade of Mastergame in AA57 and so its reappearance on a compilation is excellent news.

The game sees you, Turrican, fighting aliens and monsters all over the galaxy. It involves much jumping and shooting across an eight-way scrolling rocky planetscape. You can pick up extra weapons, beam-up R-Type fashion and search for hidden bonus rooms.

Turrican can jump great heights and get hold of some quite devastating power-ups. Just as well, as the screen is usually full of very dangerous bad guys. The playing area is absolutely enormous and packed



• Turrican stands around waiting for something to happen. He won't have to wait long, however - there are tons of baddies waiting just around the corner, armed to the teeth.

walk, all can be Occasionally, a bull will

charge on to the screen. Hitting the bull reveals a power-up globe. Collect enough of these and you are transformed into a creature of vast power.

The graphics are muddled in the extreme - they're also big, slow and jerky. The sound is barely reasonable and the gameplay is extremely dull. It's a shame, because the idea was decent enough, it just suffers from terrible implementation. Not much fun and a visual nightmare.

with tricky puzzles and fiendish bad-geezers.

It's quite easy to get lost in the maze-like levels and there are plenty of surprises waiting on ater levels. The graphics are dreeeamy! They're colourful, well animated and beautifully designed. Sound is good, but the best part is the gameplay. So smooth, so well thought out and very, very big!

Turrican is superb and has to rate as one of the best Amstrad games ever. As part of a compilation, it's a complete barg!

standards on the Amstrad when it was first released. It's a horizontallyscrolling shooter, but with enough originality and style to make it stand out from the crowd. It includes novel extra features.

At the start of the game you are given a choice of four ships. These are unarmed initially and you have to equip them with the weapons of your



guardians, is superb.

The graphics are still impressive, even compared to more recent releases. Very colourful and bril-



choice. You have to compromise between what you chosen ship can carry. This gives the game an immediate element of strategy, something missing from many games of this type.

There are lots of aliens to destroy and some very baddies to deal with. Everything in the game

liantly designed. One weird feature of X-Out is the location of all this mayhem. Not deep space as you might expect, but deep water. (It does look like space though...)

The sound is a bit poor, but this is more than made up for by the superlative gameplay. It's the perfect shoot-em-up and easily one

SECOND **OPINION**

"Four excellent games - so why did Ocean stick in that dire old plodder Altered Beast? Don't let that put you off, though - Power Up is we worth buying for the other four alone."

Rod Lawton

CHASE HQ **TURRICAN RAINBOW ISLANDS** X-OUT ALTERED BEAST

92% 90% 90% 85%

What a stonker! Every game (with the exception of Altered Beast) the best of its kind. Outstanding value and a barghunters delight.

ust when you thought this was shaping up to be the perfect compilation... along comes Altered Turkey. Oops,

sorry, Altered Beast. This game was converted from the unlikely Sega arcade hit. The game did well in the arcades mostly due to big sprites and colourful graphics. It lacked content and was basically a

What about the Amstrad conversion? Oh dear. Here it is, in all its hideous glory, faultless compilation.

The gameplay is very simple You control a muscle-bound hero, walking along a horizon



, no idea just what's going on here. It messing up an otherwise looks like some well dodgy sprites attacking some other, equally dodgy sprites.

ny excuse for a compilation, the Codies, this time it's cartoons (and with no known cartoon characters in sight). There are the usual four games and with fairly distinctive styles. Are they any good? Well, let's

Wizard Willy

It's a hard life being a wizard. Everyone's out to get you. From ogres to fairies, they all want you dead. None of this Paul Daniels business, with fluffy rabbits and dodgy card tricks. Oh no, you have to deal with lightning bolts and Guardian

So put on your special magic trousers and prepare vourself for a mysterious journey into the darkest realms of the



What superb graphics! The game itself is really excellent too.

enchanted kingdom... Wiz Willy seems to have no particular mission in life, other than to kill monsters and leap platforms in this horizontally scrolling romp-o-rama

The game starts off in a platform and beastie infested landscape. Wizard Willy can leap tall buildings in a single bound (well, tree stumps anyway) and fire bolts of lightning from his limited supply. (These lightning bolts can be replenished with pick-ups you discover along the

There's lots more to pick up as you leap through the levels, including extra energy, free lives and bonus points. Perhaps the most useful pick-up of them all is the Vanish Spell. This is quite simply a smart bomb which kills all the monsters in the immediate vicinity - very useful when the screen is getting a little crowded.

The best feature of Wizard Willy is the stupendous attention to detail. The graphics are superb - fairly unusual for a budget game. They absolutely reek of colour and professional design. The characters in the game all have a personality of their own and this adds tremendously to the game's appeal. The sound is fine. with a dreamy tune playing throughout.

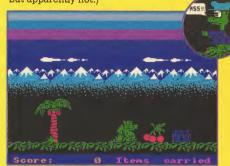
Wizard Willy plays brilliantly and has enough in it to keep you occupied for ages. A little gem.

• Little Puff

Little Puff is a dragon. Not the massive firebreathing, village-destroying, virgin-eating son of Satan that you would expect, though. No, Little Puff is a cute and mostly harmless dragon. He's small, green and more than a little cuddly.

The poor little mite is lost and he wants to find his way home to Dragonland. To do this, he

will have to collect four passes. These allow dragons entry to the security-tight land of firebreathers. (You might expect that they'd let a dragon in on the strength of his appearance,



• Little Puff's lost and he can't get home! Doesn't it make you want to blub?

The passes are scattered amongst a maze of screens and Puff has to negotiate platforms and puzzles to reach them. On the way he can collect a number of things. The first and most important of these is a potion which will allow Puff to breathe fire. This fire can be used as a weapon or as a device to solve certain puzzles. The puzzles are tricky in the arcade sense, but quite easy to figure out logically.

The game itself plays a little like the Dizzy series, with similar logic puzzles throughout. For example, when you find an uninflated lifebelt, you then have to look for a pump to inflate the damed thing.

The graphics are fine. Not spectacular, but

more than adequate for the job in hand. They convey the action and characters very well and suit the game nice. A dream to play and

Frankenstein Junior

suits players of all ages.



Oh dear, your dad's gone to pieces. Now, where do you look for the bits...?

Frankenstein Junior is a very odd little game. It features a style of play you probably havn't seen since the days of Atic Atac and Sabre Wulf. The game is a kind of wander around. explore, collect, avoid monsters, collect keys type of thing. There are no platforms, no shooting and no scrolling.

If this doesn't spook you completely, then the plot will. You are the son of Frankenstein's monster and your dad has gone to pieces... literally. You have to find his various body parts and put them together so that your Pop can once more terrorise the

to have, especially when the sky is throbbing with the sound of enemy aircraft.

The screen scrolls vertically and you have to shoot everything. That's the plot. The point of all this mindless violence isn't immediately apparent, but then who cares?

Weapons pods can be picked up at various intervals, and the pods themselves contain more than meets the eye. Shooting one cycles it through a range of different weapons and you decide which one you want

The pods also turn into energy boosters for those moments when it looks like you're about to snuff it.



excellent plot (is there one?).

Codemasters ■ £3.99

local village inhabitants.

The game is viewed from a very unusual perspective, it's sort of isometric, but not quite right. As you rush madly around the screen, you will be chased by a number of different kinds of beastie. When these touch you, your heart rate increases until you drop dead.

There are doors in every room, each of which requires a key of a certain colour. Finding the keys you need is a tricky business, as they are often hidden in the garish scenery. The pace is frantic and you spend most of your time being tailed by ghosts and monsters.

The graphics are nothing special and the sound is fairly uneventful too. The gameplay is ridiculously simple and often boring. A mediocre little addition to this otherwise fine compilation.

Olli & Lisa 3

Olli and Lisa are in a bit of a fix. They want to build a car, but all of the parts have gone missing. The parts are scattered round a gloomy old castle and are, to begin with, invisible. You control Olli as he bounces his royal cuteness around the various platforms and ledges of the castle.

To find the parts, you first have to be able to see them. To do this you will need a magnifying glass. This shows up the car parts whenever you happen to be in a screen which contains one. That part of the quest is easy enough, but finding the necessary tools and the location of the car chassis is another matter entirely. Olli can jump around the platforms with the greatest of ease and most platforms can be reached with the aid

Would you let these two build your car? Well

you can help them build their own...

of a ladder or steps.

The graphics portraying all this action are beautifully ornate and well animated to say the least. It is unfortunately a bit of a Spectrum port. but then you can't have everything, can you? Olli & Lisa plays brilliantly and is an absolutely huge game. The only real problem is with the control method. It can be a bit fiddly to make Olli do what you want, but practice makes perfect and you'll soon get used to it. Easily the best game on the compilation.

Superb value and a highly entertaining collection of games.



his cassette is a mini compilation of three Capcom arcade conversions. The conversions are all of world famous coin-ops and the theme of violence runs throughout... but are they really so tough?

Street Fighter

This coin-op took the arcades by storm when it was released. It relied heavily on massive sprites and the novel powerpads featured on the full size machine. These pads were big rubber cups containing a spring and some simple sensory equipment. This detected how hard you hit the pads and so frantic bashing was the order of the day - more involving than most beat-em-ups.

The action takes place in several different countries as you jet around the world picking fights with strangers. The object of the game is to defeat every opponent and become the world champion Streetfighter.

The game is a standard one-on-one beat-emup, with the usual jump-kicks, somersaults and punches. Your opponents vary in size and strength and include a massive punk and a tiny kung-fu master. The final showdown takes place

in Thailand against the mighty kickboxer Sagat. Reaching Sagat is actually very easy, as most of the opponents are defenceless against one move, namely the sweep kick. Crouching and pressing Fire will take you through to the end of



• Would you take this guy on? Well you could, but he'd most probably bore you to death.

Kixx # £4.99

the game. This is a dreadful piece of game design and is not helped by the tedious and repetitive nature of the proceedings.

The graphics are OK, the sound almost non-existent and the pace leisurely to say the least. Fans of the arcade machine will be sorely disappointed by this and US Gold has a cheek releasing it again!

0 1943

Now this is more like it. A straightforward shoot-em-up with lots to kill and plenty to do. The game is a sequel to the ancient vertical scroller 1942. It takes place at around the time of the battle of Midway. The second world war's most famous air/sea battle.

You fly a pretty ancient aircraft, fortunately kitted out with some hugely unlikely weapons. That's a point - if this is a WW2 bomber, why does it have smart bombs and lasers? Not to mention plasma blasters and nova cannons? Still, they're very handy things

wise mindless blaster. The graphics are lush and gorgeous, with lots of detailed colourful sprites and no slowing down! 1943 is absolutely superb.

This brings an element of strategy to an other-

Oh dear, one of your arms fell off at Commando training school.. Fortunately, the bionic technicians fitted you up with a spanky new one.

It's long, with a big grappling hook on the end. This means you can fire it at things and swing tremendous distances through the air. And you can shoot and kill enemy geezers with a sinale blow.

The game's platforms are infested with all manner of nasty goons and killing them quickly is your main priority. You wil also come across birds and killer bees. These are more of an irritant than anything else, knocking you off platforms, often to your doom. The enemy soldiers are persistent and will chase you around, trying to kill you off.

The action starts off in a gloomy, darkened forest, filled with danger. From here, you have to make your way to a big, imposing castle and that's where it starts getting tricky. The final conflict takes place in a giant missile silo. Your objective: to destroy the superweapon and save



the world and all this before breakfast!

Graphics are fine (a touch of Spectrumitis methinks), well designed, but with dodgy scrolling. The sound is limited to the odd bloop and bleep, but isn't all that terrible. All in all, a decent little platform shooter.

A decent compilation, marred by the inclusion of the awful Street Fighter.

WIN A PC 1640 **COMPETITION**

INTRASET LTD

Tel: 025 72 76800 (Main office & 24 hr order line) Helpdesk 0490 3284 (weekdays 3-4pm) Fax your order on 025 72 74753









All prices include P&P and VAT. Overseas orders please add £5.00

CASHMASTER

HOME AND BUSINESS ACCOUNTS

Master your own finances. CASHMASTER is the easiest to use, most versatile accounts program yet written.

CASHMASTER is suitable for both small business

accounts or home finance use.
We wrote CASHMASTER for our own use out of sheer fru We wrote CASHMASTER for our own use out of sheer frustration with the other so called easy to use packages. CASHMASTER allows you to input entries in one easy operation and yet allows you to extract the absolute maximum of information in an impressive array of statements and reports: just look at its range of features:

Easy natural data entry - just like a handwritten ledger.

Full VAT analysis or omit VAT altogether if you wish.

Any amount of ledgers at one time.

No set time periods, span any time period - no one year limit.

Reports can be produced over any time span (1 day to 100 years)
Up to 100 user definable Class and 20 Accounts Codes.
Detailed statements by selected Classes or Accounts.
Profit & Loss Statement.

Profit & Loss Statement. Tagging of entries for report selectivity. Entries can be inclusive or exclusive or zero VAT.

Entries can be inclusive or exclusive or zero VAT.
 Automatic repeat of entries (standing orders etc.) yearly, half yearly, quarterly, monthly, fortnightly or weekly.
 Insert entries anywhere in ledger, CASHMASTER automatically sorts into date order.
 Search and find option on any entry anywhere within ledger.
 Reports can be output to screen, printer or disk file.
 Reference field for every entry (Invoice no. cheque no. etc.).
 Split and merge ledgers at any time.
 All functions available from main program screen, Class and Accounts codes visible at all times.
 FREE pop up running total calculator called up with one key press.

key press.
CASHMASTER IS THE MOST USER FRIENDLY, POWER-FUL AND VERSATILE ACCOUNTS PACKAGE YET - YOU WON'T BE DISAPPOINTED.
And now available with...

CASHMASTER INVOICING & STOCK CONTROL

Full customer data file - easy to find account records.

Full stock data file, price lists, re-order lists.

Full invoicing with user defined messages.

Full invoice editing, invoice to & deliver to fields.

Pre-paid, account or credit note, full VAT facility.

Settlement, no return & line discounts. Stand alone invoicing/stock control or integrates fully with CASHMASTER for a FULLY FEATURED ACCOUNTS/INVOICING PACKAGE costing less than a quarter the price of its rivals.

CASHMASTER \$39.95 CASHMASTER INVOICING £39.95
BOTH PROGRAMS TOGETHER £69.9

££££ PROFIT FROM YOUR MICRO ££££

RECESSION? WHAT RECESSION?

Make your Micro earn! Whatever make of micro you have you can use it to make a good income even if you only have a couple of hours

a good income even if you only have a couple of nours spare each week!
This is not PIE IN THE SKY, MAKE A MILLION BEFORE BREAKFAST nonsense but a true report of exactly the sort of steps that we ourselves took at INTRASET.
We have put together a package of easy, sensible business ideas which can easily be used by anyone with any Micro.
NO COMPUTER EXPERTISE REQUIRED.

Earn £££'s from home doing what you enjoy doing - using

u probably already have everything you need to start earning Hundreds of potential customers in your area who will GLADLY pay for your services. We tell you how to find them Part time or start your own full time business. Ideal for nds, unemployed etc. Very little capital

outlay on projects.
Full step by step sixty page book PROFIT FROM YOUR MICRO comes complete for high

£14.95 inclusive

SPECIAL DISK DEAL

	£	£	£			
DISK	10	50	100			
3" CF2 (AMSOFT) 3 1/2 DSDD 5 1/4 DSDD	19.00 6.90 3.90	92.50 32.00 19.00	180.00 60.00 37.00			
GENUINE HIGH QUALITY DISKS						

POOLSMASTER

A LICENCE TO PRINT MONEY" - Mr. F.C. Hammond of Essex
WE HAVE WON MANY THOUSANDS" - Mr. P. E. Roberts of Dorset

Just a couple of the many unsolicited testimonials about this truly amazing Football Pools Predictor Program which has consistently astounded us with its accuracy. Check out its features: Predicts homes, aways and draws.

No fiddly typing in of team names: unique indexing system for quick entry of fixtures and results just type in the results each week from your usual newspaper and the program updates itself.

Uses scientific formula which is the result of many years oses scientific formula within the least of many years study of the football pools to give a strike rate which is consistently higher than the laws of average.

Also has a SEQUENCE PREDICTOR option in addition to

form Predictions which analyses coupon number sequences. This option has astunded us in the past and continues to do so.

Can be used for league and cup matches. Updates seasor after season. No need to buy a new copy every season. Send for POOLSMASTER today and increase your

chances of that JACKPOT. Comes complete with manual and informative Pools Guide.

DISKS AND TAPES £24.95

* * SPECIAL OFFER **

SPECIAL COMPENDIUM DISKS/TAPES POOLSMASTER/COURSEMASTER £44.95. BUY ANY THREE PROGRAMS AND RECEIVE PROFIT FROM YOUR MICRO FREE OF CHARGE

THE GRAPHOLOGIST

HANDWRITING ANALYSIS PROGRAM

"UNCANNILY ACCURATE" - 8000 PLUS MAGAZINE Analyse YOUR handwriting, or your partners, friends etc.

What are they REALLY like! Your handwriting always reveals

what are they HEALLY like! Your nanowriting always reveals your true nature, state of health etc.

This program is a must for anyone interested in handwriting analysis, both expert and beginner alike.

The program will provide an analysis of a subject's handwriting ranging from a simple signature analysis to a full 15 page complete character report. Ideal for prospective employ

rs, experienced graphologists or anyone interested in this ers, experienced graphologists of anyone interested in this fascinating art.

• All you need is a sample of the subjects handwriting and follow the simple on screen instructions. Upon completion you are left with an in depth report detailing all aspects of your subjects character from career ambition, state of health

your subjects character from career ambition, state of relativishing up to sexual preferences and megalomania!

• You may even edit this report using your word processor for representation to your subject/client.

THE GRAPHOLOGIST is a must for serious business use or simply have loads of fun entertaining your friends whilst learning the finer aspects of this fascinating subject.

• COMPLETE WITH MANUAL OF GRAPHOLOGY

Price £49.95 inc. VAT and P&P

All programs available for IBM/PC & compatibles, all Amstrad PC's, Amstrad PCW's, Atari, Amiga, CPC 6128 (unless otherwise stated). Perm-Master also available for Commodoere 128 disk. Coursemaster and Poolsmaster also available for all Amstrad CPC's, all Spectrums and C64 & 128

COMPETITION RULES

Every purchase made qualifies you to enter our competition draw. The total value of your purchases will determine the prize won.

There will be one 1st prize only per draw.

Spend up to £20.00 - 1st prize = a Star LC printe Spend up to £40.00 - 1st prize = Amstrad PC1512 SDMM Spend over £40.00 - 1st prize = Amstrad PC1640 SD colour. nners up will each win full set of Intraset software as above. Intraset's decision final on all matters. Send SAF for list of winners

Draw dates 28.09.91 and 28.02.92.

COURSEMASTER

PROGRAM

BEAT THE BOOKIE FOR A CHANGE!!

RATES ANY RACE using racecard in any daily paper or racing paper - BOTH FLAT AND JUMPS. Racing paper not required, ordinary daily paper is all you need.

Gives clear forecast of best selection PLUS second and third for Tricasts etc. and even recommends type of bet. Will advise best bet, good longshot or Each Way and ever when not to bet.

No more struggling with a calculator to work out your winnings. COURSEMASTER works out your WINNINGS on most popular types of bet ie. SINGLES, DOUBLES, PATENT YANKEE, CANADIAN, HEINZ etc.

MAINTAINS A BANK ACCOUNT - Bet like a PROFES-SIONALI Compare COURSEMASTER'S performance with your favourite Newspaper tipster.
Complete BETTING ADVICE from first principles. Even if

you have never seen the inside of a betting shop the easy to understand betting guide takes you from the first princi ples of betting, types of bet, staking plans to helpful advice on building a betting bank PLUS the amazing COURSEMASTER SYSTEM BET.

This superb easy to use betting system regularly provides our customers with MAJOR WINS for small stakes - try it and amaze yourself. Based on sound mathematical princi ples this betting system is based on Permutations and seeks to maximise your returns on minimum stakes. TWO MAJOR WINS A YEAR IS ALL YOU NEED TO BE IN

Will even PRINT OUT YOUR BETTING SLIP for you if you have a printer!

COMPLETE WITH 20 PAGE BETTING GUIDE AND

DISCS AND TAPES £24.95

PERM-MASTER

If you enjoy doing the Pools and regularly use perms as we at INTRASET LTD. recommend then checking your coupon can be a nightmare. Have you won or haven't you? Perm-Master ends the agony by checking your perm for you. Simply tell it which of your coupon numbers are draws and it will do the rest, telling you how many winning lines you have. Perm-Master comes complete with several of the top perms already built in, but if your favourite perm is not there then simply create your own using the unique permeditor. arready built in, but if your readurite perm is not lifere their simply create your own using the unique perm editor.

Fast and simple to use
Unique PERM EDITOR
Create your own perm using the inbuilt perm calculator, test your own theories etc.
For most block and single line perms
Price £19.95

SPOT-THE-BALL

For all SPOT-THE-BALL fans this program is a must, no more tiresome counting of 'x's or messy rubber stamps. Use our computer to do your SPOT-THE-BALL coupon. Just tell your computer where you think the ball is using the

screen template supplied.

Will print out up to 540 micro-fine crosses in your chosen shape, or simply tell it to choose at random. Learns as it goes - tell it where the ball is every week and

build up a database of results to use in SPOT-THE-BALL's equence predictor option. Vorks with any Epson compatible dot matrix printer or build

our own printer driver using the on screen option. LET SPOT-THE-BALL fill in YOUR COUPON this week SPOT-THE-BALL £17.95

INTEREST FREE CREDIT TERMS Spend over £80 and spread the cost at no extra charge! (Cheque purchases over £80 only). Simply divide your order by 4 and send us four cheques each with your name and address and cheque quarantee card number on the back. Date the cheque with today's date and post-date each of the other cheques by one month i.e. 1.5.91, 1.6.91 etc. We will then hold each cheque until it is due.

HOW TO ORDER: CHEQUES, P.O.'S TO: INTRASET LTD (DEPT. AA) FREEPOST 10 WOODSIDE AVENUE, CLAYTON-LE-WOODS, CHORLEY, LANCS. PR6 7BR OR PHONE/FAX AS ABOVE FOR LIGHTNING FAST SERVICE. WE ACCEPT ALL MAJOR CREDIT/CHARGE CARDS. SEND SAE FOR FREE SOFTWARE CATALOGUE

BUDGET BONANZ

TTRO POWER codemasters •£3.99

Codemasters back-catalogue extravaganza. As usual, the value is incredible. Can you say the same about the games...?

• Twin Turbo V8



• Now this is a real car. It looks suspiciously like a Ferrari F40 and it certainly goes like one.

Twin Turbo V8 contains quite a few surprises. Firstly, it's from Codemasters and it isn't a platform game, nor is it a vertically-scrolling race game, nor does it have the word "simulator" bolted onto the title! The latter point especially is the most interesting, especially when you consider that this is the closest the Codies have ever got to a true simulation of a

When the game is loading, you are treated to a spectacular loading screen, the game runs and brilliant music plays as an intro. The game itself is a 3D first-person-viewpoint racing game, with you at the controls of an immensely powerful driving machine.

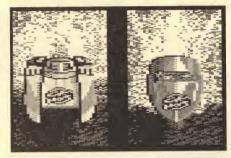
Accelerate away from the start line and you soon discover TTV8's best feature. The road moves faster and smoother than anything else you've ever seen on the Amstrad. It really is the slickest, swiftest piece of games programming you're likely to see for a long while.

The backgrounds lack detail, but the road surface gives a very a nice sense of realism. It's a bit of a shame then that there isn't that much to do. The race is very boring after a while and only the incredible speed makes things even remotely difficult. Still, it's fun for a while and it looks blimmin' spanky.

Pro Powerboat

Pro Powerboat is a vertically-scrolling race game - you control a souped-up speedboat, racing against time, as well as against some very nasty opposition. These guys will try to ram you as they overtake and can often smash your boat against rocks in the process.

Fortunately for you it's not all racing. Your boat is equipped with a rather large contingent of floating mines. A press of the Fire button drops the mines in the path of any approaching boat. Contact with the mines leads to an explosive finish. Be careful not to hit any yourself.



 Choose your weapon. They both handle the same, so it's really a choice of your favourite

There are other obstacles to avoid in the meantime, including the entire Oxford/ Cambridge boat race team, who apparently took a wrong turning at Tower Bridge and have found themselves in deep trouble. It's often a good idea to bomb the spineless wimps or bash them off the river.

The graphics are completely spectacularly OK. They look good, they scroll well and are very colourful. Good tunes, nice sound effects and brilliant presentation make this game a joy to play. The action is intense, the pace frantic and the game challenging. Easily the best of the bunch on this compilation.

Well, there had to be one rotten egg in the pack. That's not to say that ATV is bad. it's just that it doesn't really come up to the standard of the other games in the pack.



• These all-purpose, all-terrain vehicles can really take some punishment. The hard bit is

We actually reviewed this one last issue when it was a part of the Quattro Racers collection. So here it is, a month later and, spookily enough, it hasn't changed a bit.

It is still a horizontally-scrolling racing game, much in the mould of Kikstart or even

The poor graphics and dodgy sound don't help, but it aint' that bad at the end of the day.

Moto X

Moto X is horizontally-scrolling race against time looking uncannily similar to that ancient title Kikstart. As you ride along the rugged and eminently dangerous terrain, you will come across various obstacles. These include barrels, logs and some very steep drops.

The game is actually in two sections. The first is a time trial, the second is a kind of bonus stage where you have to perform various stunts for points.

The main element of gameplay is the control method. It will take you quite a few tries to get used to it, and even more to get past the first obstacle

The bike goes at a set speed in the first section. You can't brake or accelerate and your only worry is jumping and hopping over the obstacles



• The rocky terrain threatens to wreck your bike at any moment. Stay calm, don't panic and keep going.

The graphics are actually very nice. They scroll smoothly and are, for the most part (well, the bike anyway), well animated and detailed. Sound is a bit lacking, but there's an excellent intro tune, just in case you lost your entire record collection.

It plays well, looks good and by golly, it does you good!

Quattro **Power offers** a variety of different game styles - and you can't argue with the value for money.

BUDGET BONANZA

RED HEAT Hit Squad # £2.99

rnold Schwarzenegger, everybody's favourite psychopath, is back (he said he would be). This game is based on the Carolco movie of the same name and sees our hero playing a Russian cop, Ivan Danko.

Danko is on the trail of a Russian drug dealer who has fled to Chicago. Danko



 Arnold Schwarzenegger with his tremendous weapon and his somewhat weedy pal. Mind you, everyone looks weedy next to Arnie.

must team up with an American cop to find this well dodgy geezer. As you can imagine, they don't exactly hit it off, but true to

buddy movie fashion, they end up being best pals and saving the world etc.

The game on the other hand, features only Arnie and takes the form of a mindless beat-em-up interspersed with bits of shoot-em-up. When the game starts, Arnie is viewed naked, fortunately from the waist up. Why is he naked? Because he is in a sauna, that's why.

Naked men!

Lots of other naked men come in

at this point and proceed to attack poor old Arnie. In the spirit of diplomatic relations, Arnie head-butts them and punches their lights out. There are only two moves available - the Glasgow kiss and the old one-two.

This limits the beat-em-up aspect somewhat. Fortunately, there are other sections to come. The first is a joystick-waggling exercise, where Arnie has to crush what looks like a block of ice. Doing this successfuly gives you a massive energy boost for the next section. The next bit is a kind of Op Wolf type thing and very dull it is too.

The graphics are fairly decent, but very repetitive, the sound no more than average and the gameplay stinks. Not the best game

A duff conversion of a decent film. Fair graphics, but useless gameplay.



indicators is a conversion of the hit Atari coin-op. The game is a shoot-em-up of epic proportions set on a weird metallic planet in the year 2525. You have to save the Universe from the evil plans of the Tangent

Exploding fuel tanks!

Each level is a horizontally-scrolling maze packed with dangerous enemy tanks and flying saucers. Obviously these have to be destroyed to progress, but your main battle is with your volatile fuel tank. When you run out

VINDICATORS Hit Squad # £2.99

of fuel, the vapour in the empty tank will explode, so you have to pick up spare cannisters along the way.

At the end of every level there are exits. To open these and escape, you have to pick up a key. When you do get out, you'll find yourself in a bonus screen, where fuel and credit stars are there for the taking. The credit stars are used to enhance the weaponry and speed of

The pace is frenetic and the action involving. The weapon shop adds a hint of strategy to the proceedings and the game is greatly helped by the superb graphics. Vindicators is a little stunner and a very accurate conversion of the original arcade machine.

Visually stunning conversion of a very classy coin-op. An ace licence.

LED STORM Kixx # £3.99



onverted from the almost entirely unheard-of Capcom coin-op, LED Storm was released at a time when the software industry was going arcade crazy. They licensed anything that had the faintest connection with the things. LED Storm is a vertically-scrolling racing game, in much the same mould as F1 Spirit or Spyhunter. Initially you control a souped-up futuristic racing car, but you can change into a motorcycle at the press of a button. Turning into a bike enables you to jump higher and further than the car. The need for jumps soon becomes apparent as

you come across gaping holes in the road sur-

High speed action

The action is fast enough and the concept is ridiculously simple. Drive along, collect anything that doesn't kill you and jump the things that do. There are lots of bonuses to collect, including free lives, extra energy and score multipliers.

Sound is fairly decent, with rockin' good tunes and sound effects. Unfortunately, there isn't much in the way of fun. There really isn't that much to do and the gameplay is severely limited. Still, the graphics are OK and it will keep you occupied for a day or two.

Fast but not so furious. A racing game that just gets very dull very quickly.

GHOSTBUSTERS 2 Hit Squad # £2.99

he Activision game of the original Ghostbusters movie was the biggest selling computer game ever. The sequel also spawned an Activision game and was received to rave reviews on almost every format. This Amstrad version has now been re-released on the budget scene – and what a bargain it is!

Three-part thrills

The game is in three distinct parts. The first sees you, a Ghostbuster, descending a massive airshaft to reach a sewer at the bottom. On the way down, you will be accosted by different types of supernatural goons. Most of these can be destroyed using the proton beam pack you're equipped with. If the ghosties are too much for you, your equipment also includes PKR bombs and a very handy shield. When you reach the bottom of the shaft,



• Travelling down the airshaft, and you might just get grabbed by the ghoulies on the way. Sounds painful.

the action changes and your next task is to guide the Statue of Liberty (seriously) along Broadway. Ghosts again hinder your progress and must be avoided.

All of this leads to a final showdown with Vigo the Carpathian (seriously twisted spook type J dude). You have to rescue baby Oscar and save the world. Easy,

The graphics are fab, the music superb and the presentation superlative. One of the best budget releases ever.

One of the best film licences of all time and a fine game in its own right.

PROFESSIONAL FOOTBALLER Cult # £3.99



playing a game of footie by multiple

professional Footballer is a strategybased football game. Much like Football Manager or European Superleague, it lets you control every aspect of the game except the actual play. This time, though, you are in control of a player, rather than a manager and have to decide upon various strategies of conduct and ability.

This is a very strange concept indeed. Controlling a player in every aspect of football except the game is definitely odd. No, you don't get to go to nightclubs and have a fight. You don't hang out with I page three girls, nor do you get to sport an entirely stupid

Unusual training...

What you do get to do, is train for the next match. Training is bizarre. The computer gives you a multiple choice quiz on various aspects of football skill. For example, it may ask you what you would do in a penalty shoot-out or a corner kick. You have four possible replies and percentages of the chance of success each option has.

This method is frankly, a load of old pants. The game is mind-numbingly tedious and will only appeal to people who find train-spotting and anorak-wearing deeply exciting. Avoid!

Another management sim and very exciting it is too if you're completely mad.

VAMPIRE Codemasters # £2.99

ampire is a fairly typical Codies release. It's a platform game with heavy elements of exploration and treasure hunting. You play Brok the Brave. Brok is an intrepid space hero and has taken it upon himself to come to earth and rid us of the curse of the dreaded Dracula.

Dracula lives in a castle of 95 rooms, so there's a lot to see and do. You're not alone in this castle, though; there are all kinds of baddies inhabiting the place, from your standard undead night-creature, to your patented Drillo-matic killer tank.

> Vampire is one of the oddest platform games vou're ever likely to play, with some really weird jumping techniques

Collect the keys

To rid the world of Dracula you must use your rather odd jumping technique to traverse the maze of platforms and collect five keys. These open, uncannily enough, five locks. You then have to fix a generator, open six shutters and collect a hammer and stake. If you have any energy left after that lot, you must confront the evil of the Prince of Darkness himself.

The platform action is fun, although the jumping is a little quirky to say the least. The graphics are reasonable (a little too Spectrumlike for their own good) the sound is average and the task huge. Not bad, but very similar to other games in the genre and technically uninspiring.

Another platform based arcade adventure, with lots to see and do.

haircut.

Serious Games

because they use the extra 64K or RAM to store data. Our games are very large, taking up between 100k and 140K of disk space, but they are not copy protected.

WAR IN THE WEST - £15.00

A large scale war game for 1 or 2 players, covering the 2nd World War in the western hemisphere. Players may command either the Allied or Axis forces. The game starts in late 1941 as the German Russian offensive stalls, the Afrika Korps prepares to counter-attack British forces in Libya, and the U.S. declares war on Germany. This game contains possibly the largest map in any war game, 230 by 152 squares, stretching from Britain to Soviet Asia and from North Africa to Norway. There are also 480 land units, 220 cities, air power, and naval

SOCCER 6128 - £6.00

An advanced soccer strategy game at a budget price. This early version of SMS contains 80 clubs in 4 English Divisions, domestic and European cups, and 2100 players.

SOCCER MANAGEMENT SIMULATOR - £15.00

Probably the most realistic football strategy game available for any home computer, giving the manager a uniquely detailed control over team strategy. Manage one of the 92 clubs in the English League or the 38 in the Scottish League. With 100 foreign clubs there are over 3800 players to buy and sell.

IMPERIAL CONQUEST - £15.00

Multiface 2..

A war/strategy game for 1 to 5 players, based in the ancient Mediterranean. The year is 270 BC and you lead one of five nations capable of conquering the whole of the Mediterranean world; Rome, Macedonia, the Seleucid Empire, the Ptolemaic Empire, or Carthage.

As leader you can alter tax levels, recruit troops, hire mercenaries, build fleets, make trading pacts, ally your nation with others, declare war, and

Prices include postage. (Overseas add £3.00) Cheques/Postal orders payable to Serious Games. Dept AA9, Serious Games, PO Box 6, Seaham, Co Durham, SR7 7EE

3.5' DISK DRIVE

OUR SLIMLINE SONY 3.5' DISK DRIVES COME COMPLETE WITH FULL INSTRUCTIONS, FREE UTILITY SOFTWARE AND A 12 MONTH GUARANTEE FOR ONLY £69.99 (plus £4.00 for postage and packing). Ten 3.5' disks only £10.00.

SPECIAL SUMMER BARGAIN

A 3.5' disk drive. ROMDOS and a 6 socket rombox for only £99.99 (plus £5.00 postage and packing). This is a genuine saving of £40!!

464 OWNERS

DDI-1 Amstrad 3' disk drives now in stock. The only disk drive that can be used as a first drive on a 464. Comes complete with manual and system disk. Only £159.99. Ten 3' disks only £17.50.

Please state computer (464/664/6128) when ordering. 464 owners must have a DDI-1 before using a 3.5' disk drive.

SIREN SOFTWARE



Wilton House, Bury Rd, Radcliffe, VISA Manchester M26 9UR.

Tel: 061-724 7572 Fax. 061-724 4893

Small Selection From Our Warehouse

.£45.23 + £1.18

Amsoft 3" disks box 10 + free disk box £14.95 + £2.35 Disk box while stocks last!

Multiform O for ODO Dive (ME OF)

Multiface 2 for CPC Plus (MF-2E)£47.95 + £	1.18
DK 64K Ram expansion, 464 only	38.99 C
D-1, Second 3" disk drive (6128 required DL-2 cable) 99.95	49.95 C
DDI-1, 464 First 3" disk drive	159.97 B
6128 CP/M Plus System Disk	16.75 E
3.50" DS/DD Wabash/Verbatim Bulk + LabelsBox 10	4.25 E
CPC Centronics Printer Lead 14.95	7.48 B
CPC To Video Lead, State BNC or Phono Plug 9.95	6.99 F
Amstrad Screen Designer, Disk	2.75 D
Amstrad Decision Maker, Disk	3.50 D
Expansion Port Adaptor for CPC 464/6128 plus machines (WIDGET) 14.95	9.95 E
Amstrad DMP2000/2160/3000/3160/3250 RibbonPkt 2 11.90	3.80 F
Advanced Art Studio, CPC disk (requires 128K memory) 22.95	16.07 E
10025 464 Upgrade ROM	24 50 F

PP5 BUSINESS PROMOTION PACK £119 Saving

The Amstrad 12 Pack, 12 games on cassette for the CPC464+.

3 x Blank disks	£4.49
Business Program	£49.00
6 Games	£59.70
Joystick	£14.95
	£128.14
Discount	£119.19

Total Price £8.95 + £4.70 p&p

All prices correct at time of going to press!

OFFERS WHILE STOCKS LAST

COMPUTERS NOW IN STOCK

All subject to availability	RRP	WAVE
CPC 6128 & Green Monitor + Joystick + 17 games on disk	.299.99	249.00
CPC 6128 & Colour Monitor + Joystick + 17 games on disk.	.399.99	339.00

EX-SOFTWARE HOUSE 3" DISKS

Pkt 10 RRP £29.90 Special £9.95 + £1.18 p&p

AMSTRAD MP-3 TV TUNER ONLY £34.99 + £3.53 p&p

AMSOFT 3" DISKS BOX OF 10 ONLY £14.95 + £2.35 p&p

All Amsoft 3" disks come with free disk box while stocks last!

WAVE PRESENTS ENVIRONMENTLY FRIENDLY PRICE LISTS

OUR CURRENT PRICE LIST RUNS TO OVER 28 PAGES! AND BECAUSE OF THE AMOUNT OF REQUESTS FOR OUR PRICE LISTS WE ARE DESTROYING TREES AT A MAMMOTH RATE SO A TECHNICAL BOD HAS TRANSFERRED OUR PRICE LIST TO A THREE INCH DISK! AND WILL COST YOU ONLY £2.26 YOU CAN USE THE DISK WHEN FINISHED AS A BLANK!

For people who have no disk drive send 5 x 22p stamps for a printed version (Allow 14 days for delivery)

Eng. Mainland post & ins: (A) £5.88 (B) £4.70 (C) £3.53 (D) £2.35 (E) £1.18 (F) 59p (ANC) 3 Day £10.35 Next day £13.80. COD + £2.30. Max UK post chg. £8.05 per 20Kg/£500. ALL PRICES INCLUDE VAT. All sales subject to our Trade Terms of Trading

W.A.V.E. (Trade dept. AA 9108) Walney Audio Visual & Electrical Distribution, 1 Buccleuch Street, Barrow-In-Furness, Cumbria, LA14 1SR

Tel: 0229-870000 (6 lines) Hours: Mon-Fri 10.00-5.00



GIFO.

ignetic

£6 disk, 5128 & PCW only Harvey Gardens, Charlton, London SE7 8AJ.

he Balg has been eagerly awaiting Magnetic Moon for some time now. Originally written on the Electron, then converted to BBC and then to the Spectrum (each conversion an improvement on the previous version), Magnetic Moon has been anticipated on the Amstrad for quite a while, but finally it's here - and the wait's been worth

The story-line is hardly original, but then it has been some years since it was first conceived! The date is 9th June, 2153AD and you are Sub-Lieutenant Mike Erlin, assistant Astronavigation officer on board the Survey Spaceship Stellar Queen. While on patrol you lose all contact with your scoutship, the Pathfinder. On arriving at the last know position of the scoutship, the Queen is nearly wrecked as a powerful tractor beam drags it down onto the surface of a nearby moon.

Fortunately, the ship sustains little damage, but the sensors show that a powerful magnetic field is preventing the Stellar Queen from escaping. The source of this magnetic field is found to be a huge underground installation generating vast amounts of energy.

"Magnetic Moon has been anticipated on the Amstrad for quite a while, but finally it's here - and the wait's been worth it!"

You, as ever the eager adventurer, volunteer to join the search party, but your Captain says you must stay on board to help supervise repairs! After nearly two years of routine survey work, the chance to get in on some real action is just too good to miss. So, you decide to disobey the captain by jumping ship and searching for the underground installation on your own...

This is where part one of Magnetic Moon starts - on the bridge of the Stellar Queen with Captain Rumsey, Commander Adams and Lieutenant Rodders busying themselves for

NEWS... NEWS... NEWS... NEWS... NEWS...

his month the Balrog explores the secrets of

be like to be the size of Paul Daniels" in Project

Magnetic Moon and discovers "what it would

The Adventurer's Herald

X (Microman)...

A new fanzine, The Adventurer's Herald, has just been published. Written using a 6128, The Adventurer's Herald plans to cover a wide range of fantasy - including role-playing - games, live roleplaying, fantasy books, short stories, game reviews and the odd competition.

The mag costs 80p and is available from PO BOX 522, Tweedale, Telford, Shropshire.

The first issue wasn't very good value at only ifteen pages, but hopefully subsequent issues will improve as more material is received.

The editor, Rik Jones, also informs me that he is looking for contributors, mainly in the computer section. So, if you're interested in a spot of Adventure Journalism, why not give it a go?

The Chaos Maze

Len Townsend, author of the mediocre Labyrinth Hall, Tulgey Woods and Twelve Lost Souls (reviewed in AA54), has finally, after much hard work, finished the sequel to Tulgey Woods, The Chaos Maze.

GACed again, the Chaos Maze is an RPG with 660 locations (yep, you heard right – 660!), with a picture for each - should be interesting to see. For more details, write to Len at 61 Lowergate Road, Huncoat, Accrington, Lancashire BB5 6LN.

 The three Len Townsend games mentioned above (Labyrinth Hall, Tulgey Woods and Twelve Lost Souls) can now be obtained from Adventure PD - just request PD DISC: AMS 10 and send a disk and one pound and you'll get those three games plus two others.

Buy two, get one free! Recreation Re-creation, the company that seems to

appear every month in the news pages, has launched a special offer for Balrog readers. Buy any two Recreation Re-created games and get one free! For more details, and a price list, write to 39 Gargle Hill, Thorpe St Andrew, Norwich, Norfolk NR7 OXX or phone 0603 31678.

Talking of Recreation Re-creation, the company has just re-released three adventures: The Last Believer by Paul Lucas, Nythyhel by Tony Collins and Die you vicious Fish by Paul Gill.

Last Believer costs £4.50, is 6128-only and is a swords & sorcery style romp. Nythyhel is in two parts with "superb graphics" and "atmospheric descriptions" and costs £2.50 tape, £4.50 disk. Last but not least, Die you vicious Fish, by the same author as Al-Strad (reviewed last month), is available at £2.50 tape, £4.50 disk.

Butch Cowardice in the Undersea Adventure

Rob Buckley, author of the technically amazing Eve of Shadows (reviewed last month), informs me that his latest game, Butch Cowardice, will be the first ever WIMP adventure on the Amstrad: it has "good graphics, 356K of code, reams of text and it reads like a book".

The system apparently outshines Eve and Rob believes it will be better than any other home brew game – lets hope it's all Rob promises! For more details, write to him at 57 Lebrun Square, Kidbrooke, London SE3 9NS.

departure. (If you recognise any of the previous names, you might also recognise Midshipman Grue. Chief Engineer Bond and Lieutenant

Part one is meant to be an introduction to the rest of the game. Nearly everything can be examined and there's lots of things to do - just don't expect the puzzles to be introductory because they're not!

The first major problem you are faced with is escaping from the Stellar Queen. Not easy when

the main airlock is peopled by the search party (who certainly won't let you escape) and Midshipman Grue is on guard duty.

Directions on the ship are in naval form (port, forward etc.) and, although the Balg personally prefers normal compass directions, these terms add to the ship atmosphere.

On board the Stellar Queen you'll find a whole plethora of objects that can be taken. Unfortunately, you can't carry them all, so you must choose! The rest of part one is on the sur-



face of the moon itself, navigating derelict freighters in the search for the installation. The puzzles don't get any easier after leaving the Stellar Queen, either - good luck supporting those loose plates!

Part two is set inside the mystery installation and features a well thought out maze inhabited by the cute cleaning robot Jojo and loads of verbose text and clever puzzles. The installation is inhabited (I'm not saying who by, as I don't want to give too much away!), and there is always a constant fear of being discovered. The Balg was biting his claws all the way through - a testament to the game's atmospheric descriptions.

Part three has even more puzzles and great text but I won't say anything more. Suffice to say, if you enjoyed the game as much as the Balrog, you'll be itching to play Starship Quest!

Larry Horsfield, the author, is a perfectionist when writing adventures and Magnetic Moon shows this. Larry has spent much time and effort listening to playtesters' comments and has created a game with oodles of text, loads of brilliant puzzles and an atmosphere of - dare I say it - early Infocom standards.

Parser-wise, there are numerous ways of manipulating objects and looking in places. You can look around, look over, look under, look in and you can also look in various directions! You can also search and examine various object and places. Larry uses adverbs in some puzzles as well, adding to the difficulty.

Magnetic Moon is a massive game. There's so much in it that it'll take you a long time to complete. In the Balrog's opinion, it's the best game of the year!

ATMOSPHERE INTERACTION CHALLENGE **OVERALL**

82% 88% 90%

Project X (Microman)

£2.25 cassette, £4.25 disk Mark Eltringham **Recreation Re-creation soft**ware, 39 Gargle Hill, Thorpe St Andrew, Norwich, Norfolk NR7 OXX. Tel: (0603) 31678.

ecreation Re-creation certainly has been busy recently. Its latest price list has 28 games, all at budget prices. One of the games is a re-release, Project X (Microman). Written by Tim Kemp and Jon Lemmon, Project X was originally written on the Spectrum many moons ago, converted to the Amstrad for Global's Fourmost adventure compilation in 1986 and reviewed in AA8.

You play the part of Professor Neil Richards, who becomes victim of a clichéd fate - while working in his laboratory on animal miniaturization a freak accident occurs

You receive a massive dose of Gamma radiation and discover that you are shrinking. Realising your danger you jump into your car and start driving towards your colleague's laboratory for help. Unfortunately, along the way, you black out and crash, to awaken a microman...

"You receive a massive dose of Gamma radiation and discover that you are shrinking..."

The first puzzle involves escaping from the car. From there you must find your colleague's laboratory, circumvent the COM-2 security system and try to get inside to contact him. Along the way you'll battle with a mole, find a needle in a haystack, develop a photograph and carry out various other tasks to help you in your quest to return to normal size.

Quilled, with average graphics, Project X is enjoyable. But, as with Orb Quest last month, it suffers at times from the lack of a decent parser. A good game, but perhaps a bit dated nowa-

ATMOSPHERE INTERACTION CHALLENGE **OVERALL**

45% 45% 60% 62%

Contacting the Bala

The Balg is desperate for new contributions to the Cluepot and Just for Laughs sections. To get in contact with him, write to: The Balrog, Amstrad Action, Future Publishing Ltd, Beauford Court, 30 Monmouth Street, Bath, AVON BA1 2BW.

Bairog's Cluepot

(Upminster), Edmund

Honosutomo (Hemel

Forbes (Gourock)...

Crompton)

Gnome Ranger

Guild of Thieves

pin as a fishing rod.

Sunderland)

Hempstead) and Adrian

Frankenstein (esp for Jonathon

hinges and unscrew hinges with knife.

to her nest, then hit chicks.

Rigel's Revenge (esp for D.

At start: Get money, W. D. drop money, sit,

wait, stand, get money, examine chimney, get

picture, E, search garden, examine chest &

■ To get the leprechaun: ask the nymph to

dig at the base of the rainbow with her

shovel. Don't enter the location while she is

doing so. Wait for a move, then enter. Pick

up the gold and give it to the leprechaun.

To get the eagle: Wait for her to carry you

At the Junction Chamber you will see bars

blocking your way to the SW - just break bars.

Beyond the bars at the waterfall untie the rope

ladder before you go to the temple and push the

statue. Use the snooker cue, the cotton and the

From start: Get and wear the goggles. You

see Elliot who starts to give you a message,

then dies. Examine Elliot, get satchel, Ex2,

N. E. D. N. examine unit, get medikit, U,

firmly pull bars, remove suit, wear medikit,

window (you are now thin enough to get

and press red button. You feel strong.

Bend bars, remove medikit, put all through

hanks to the following people for this month's pot of clues: Amir Mansour (London), Alistair Crook (Leeds), David Walker

To get the chocolate banana: Enter queue, exit queue, enter other queue. When the other queue gets shorter exit your queue but re-enter it again. Throw the banana (After you have licked the chocolate off) to rid yourself of the monkey.

- The name of the mad God is Tarian.
- Use the death ring on a dead party member. It works like the ANDE spell.
- Don't cast AREN as it doesn't work.
- SOSI is like the SESI spell
- · Beware of evil eyes as they can cast spells at your party.
- The stone blade is a good weapon it turns everything it hits into stone.
- The spectre snare is like a SPBI spell.
- Use the Bard to sit on the throne.
- All the spells you have cast will dissipate every time you enter the Adventurers
- If the first three characters in your party are killed and shuffled to the back, you can re-organise your party and replace the dead characters to the front of the group. As only the first three characters can be attacked physically your surviving members can have a whole round of combat without being damaged.

Bewbews

- When you fall into the water ensure you have the sonk's stone.
- Use spell book on mud.

Seabase Delta (esp for a reader from Newquay, Patrick Dyson & Ryan Spicer (Littlehampton), Jay McKenzie! · You get the ink from the speared octopus.

. The pen is in the bureau in the living quar-

- Spot disc with telescope in shaft below
- panel, tie the washing line to the magnet (third level - from the speaker in music room, type unscrew magnet) and then drop the line, then pull it.
- Play the Heavy Metal to open the doors.

Secrets of Ur

Sue Ilsley has solved Kay Wheelers problem she should give the parachute to the native and he will then leave her alone. Sue agrees that Ur is a tough game - she still hasn't managed to complete it herself!

Arkham Manor

Patrick Dyson has come to the aid of Simon Netherwood and Jon Bingham:

- 1. To get into Manor go through French win-
- The rusty key is used to get in through the French windows. Chalk is used to make the shadow dial. The cross is used with the statue and the gun is used in part one not
- 3. Take photo of smith and send to newspaper with his name. Next day go to telegraph office for useful telegram. Wait at 11 Boxer Road on Tuesday 24th at Night until somebody arrives, have gun with you and you will see what you have got to do with it.

Shadows of Mordor (esp for Jonathon Constable)

 To convert Smeagol to your side you must first get Sam to hit Smeagol with his sword (Frodo cannot do this as his sword would kill Smeagol), tie rope to Smeagol and then get Frodo to say to Smeagol "no", then "promise" and then untie rope.

To get logs out of the Marsh maze you must go the first log, drag it, S, NW, SW, drop log, NE. S. SE, drag log, S. NW, SW, drop log, eat bread - Frodo - Eat bread - Sam - NE, S, SE, drag log. S. NW. SW. drop log - Frodo ... (now all the logs are in the correct location for making a raft - 'TIE LOGS')

HELP!

Bloodwych

- Dave Murphy from Tamworth is having big problems - he cannot get out of the keep. The furthest he gets is level 2 where he comes across two doors with black locks and he can't open either of them. From memory, Dave, you must remove the two blue buttons/eyes to the east but I haven't got much further than this myself - can anyone else help? Dave also complains about problems with the load/save game option he can't seem to get it to work. From the Balg's own experience of the disk version, loading and saving can be a problem. What I have found is that you save to the game disk and don't load from the opening menu option - this doesn't seem to work. What you must do is select one-player game, generate a party and then load save game once in the game by clicking on the disk icon. This method seems to work satisfactorily but every now and then there are glitches.
- Jonathon Crompton is also completely baffled in Bloodwych. He's got so stressed with the game he's been literally pulling his hairs out (I could have made a wig from the contents of the envelope!). His letter reveals a sorry tale of yellow gates, hidden yellow keys, green switches and intense confusion - can anyone help him!?

Asylum

Jonathon also would like any hints or tips for this game as he is again stuck.

Firestone

Pervez Choudhury is stumped - how do you cross the chasm and is it possible to talk to the

Lords & Ladies of Adventure

he Balg received a letter from a Lord of Adventure in Edinburgh, Ross Younger, who wrote: "Can I ask you to please, please, please reenforce the message to enclose an SSAE when writing to a Lord or Lady. I have had a few requests recently which did not have an SSAE enclosed." Thanks Ross! The message is: no stamped self addressed envelope, no reply! Please treat the Lords & Ladies with the respect they deserve. They offer a free service and work hard for the name of

Adventure Quest · Bards Tale · Dungeon Adventure · Snowball · Worm in Paradise.

James Taylor, 9 Crossland Crescent, Aldersley, Wolverhampton, West Midlands WV6 9LG.

Adult II · Can I Cheat Death? · Case of the Mixed-Up Shymer • DAA • Doomlords I & II • Dungeon • Experience · Firestone · Jason & the Argonauts · Magician's Apprentice · Message from Andromeda · Mystery Mansion · Quest for the Golden Egg-cup · Scary Tales · Seabase Delta · Spaced-Out · Stryptische I & II · Subsunk · Tizpan. Dave Adams, 49 Myers Gardens, St. Helens, Merseyside WA9 3YX.

Seabase Delta (Thanks for the solution William! -

William Huddleston, 1 Millwell Park, Innerleithen, Borders, Scotland EH44 6JF.

Knight Tyme • Mega Bucks Andy Riddings, 10 Berkshire Street,

Chaddesden, Derby DE2 6GQ.

through it), out, get all.

Ballyhoo · Hitchhiker's Guide · Infidel · Leather Goddesses · Lurking Horror · Hollywood Hijinx · Moonmist · Planetfall · Sorceror · Wishbringer. Amir Mansour, 31 Tenterden Gardens, London NW4 1TQ. Tel between 5.30-9.30 (Mon to Fri) or 1pm-10pm (Sun & Sat) on (081) 203 3843.

Forest at World's End · Hitchhiker's Guide · Jewels of Babylon · Leather Goddesses · Message from Andromeda.

Iain McCarthy, The Old School, Church Lane, Brantham, Manningtree, Essex CO11 1QA.

Lurking Horror · Pawn. Adrian Forbes, 37 Victoria Road, Gourock, Scotland PA19 1DF. Tel: (0475) 33633 Mon-Fri 5pm-10pm, Sat & Sun 1 pm-1 0pm.

BALROG'S POSTBAG

Dragontorc Blues

Have you ever played Dragontorc, by Hewson Consultants? It's quite an old adventure, about six years, but it is my favourite. Though I would have liked to have solved it without cheating, in six years I am no closer to beating it so I have come to you for help: I can't open the two doors in the Druid's Sanctuary, I don't know where to use the locate spell and I can get into the crypt but I am unable to open the door... Please help as Hewson Consultants ignored my requests for aid!

R.Crowe

You've been playing the same game for six years?

Wow, that shows dedication! Unfortunately, my tips on Dragontorc are very sparse. Perhaps another adventurer could help?

Protocol Problems...

I am desperate for somebody's help. Yesterday, all my troubles seemed so far away, now it looked as if they're here to stay, until I remembered my AA...

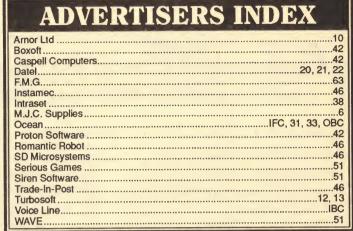
I am stuck in part one of the Fourth Protocol - I need to know the answers to three of the questions posed by Sir Anthony Plumb: What is the proof, where did it happen and how was he recruited?

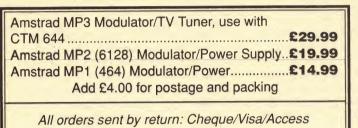
Andy Riddings

AMSTRAD ACTION September 1991

September 1991 AMSTRAD ACTION







Trade-In-Post, Victoria Road, Shifnal, Shropshire, TF11 8AF.

Tel/Fax: (0952) 462135

Trade enquiries welcome





PAGE PUBLISHER DTP.....£24.95 GENERAL LEDGER 6128.....£29.9 Machine-coded text & graphics | Simplified book-keeping system handling package which runs on for small firms or self-employed Bank/Cash/VAT/Profit & Loss etc. PICTURE DISC.....£12.50 STOCK ACCOUNTING 6128....£39.95 Integrated business package with stock, invoicing and accounts. DISCBASE......£12.50 HOME FINANCE.....£14.95 Geeps your disc collection in Manages bank accounts as well as order. Finds files in seconds! credit cards, savings, S/Os etc. KWIKFILE.....£12.50 GRAPH-MASTER....£14.95 A versatile database with many Produces TEN different types of special features and 101 uses. graph on screen or Epson printer NEW! MULTI-CODE RSX....£12.50 We also do PCW business software Programmer's toolkit adding 60 and general computer supplies at easy-to-use commands to BASIC. special prices. Ask for details All programs are supplied on disc and run in 64K unless stated. When ordering please state Computer/Printer type. Add £1 P/P. Send Cheques/POs or SAE for our full catalogue to: (DEPT AA SD MICROSYSTEMS, P.O. BOX 24, HOLBEACH, LINCS Tel: (0406) 32252

A MULTIFACE

THE ROMARTIC ROBOT SOLUTION! If you use a CPC without a Multiface, you're wasting time. Loading programs always from the start instead of continuing from where you stopped last time, not being WITHOUT able to make crucial back-ups whenever you need to, not having a chance to customize programs or just poke infinite lives - what a wastel WITHOUT MULTIFACE is to CPC what wheels are to cars - the ESSENTIAL ADD-ON

Its MAGIC button lets you FREEZE a program ANY time - just have a break and continue later, or SAVE, switch off, and reload to continue later. Saving is FULLY automatic, all is menu-driven with on-screen instructions, error reports - SO EASY! You can also study/modify programs with the built-in MULTI-TOOLKIT - invaluable! If you wish to make your computing easy, fast, safe and a joy - get a MULTIFACE

The puzzle's over! MULTIFACE - the CPC's missing link

Please send a SAE for details

WITHOUT

HANDS

Also available: INSIDER - By residing OUTSIDE CPG - in a MULTIFACE - it can look INSIDE and disassemble ANY running program RODOS - A ROM that changes CPC into a professional system

ZB(BD)S(BOUNTS_

MULTIFACE 2 for CPC	464/6128 🔲 247.95 £37.95	or for CPC+ = 249.95 £44.95
lorder		
RODOS 1999-95 £19.95	RODOS XTRA Tegas S	5.95 INSIDER - 214.95 £9.95

PLUS P&P per EACH item: UK £1, Europe £2, Overseas £3

enclose a cheque/PO/cash for £......or debit my Access/Visa No.

RAMANTIC RADATION 54 Deanscroft Ave, London NW9 8EN 24 hrs 24 hrs 181-200 8870





ofane, lewd, disgusting, appalling, epellent, vile, subversive, anarchic, comprehensible and utterly, completely hatstand. That's Viz.

For those of you who have been living in a monastery for the last ten years and don't know what Viz is, let us explain.

Viz is not a popular brand of soap powder. Viz is not a '40s superhero. Viz is the name of a 'comic' filled to the brim with toilet humour and merciless pillory of famous Dandy and Beano type characters.

Viz features characters ncluding the likes of Johnny Fartpants. Roger Irrelevant and Norbert Colon. All of these characters use real or imagined powers to combat the forces of evil. Evil is represented by policemen, parents et al.

Viz the game incorporates most of the famous characters from the comic, although you can only choose to control one of three of the guys. What you really ought to know about Viz, though, is the language used. It's a tad rude. No, actually, it's very rude. So does it offer anything other than shock value?

You choose to play using one of the following characters; Johnny Fartpants (master of the nuclear colostomy cough), Buster Gonad (and his unfeasibly large and somewhat hairy appendages) and last, Biffa Bacon (professional pampot and total sociopath).

Each of these characters has to perform a task which will earn him a number of special power tokens. In Buster's case, he must crack walnuts with his swollen peripherals; Johnny has to Fartogen Pumpoxide (FrPO2); Biffa has to drink as much Newcastle



can... but will he blow his groceries'

Brown Ale as he can. The faster you waggle your stick (f'nar, f'nar) the better you do.

Once this stage is over you go on to the main section of the game. This is a very simple obstacle race, compèred by Roger Mellie (the man on the telly). It plays a little like Metrocross - no joystick waggling, just running from left to right through a hazard-filled park. Avoid the various obstacles and nefarious characters and reach the finish line.

Hitting Fire activates your special power. For example, Johnny will shout "Blue ruin" pump, and streak off into the sky. The much needed burst of speed

will take you ahead of

your rivals. If you complete the race in first place you have another chance to bump up your power tokens in a different

The graphics throughout are funny, colourful and true to the spirit of the comic. The tunes are suitably daft and the presentation as tacky and

waggling event.

The gameplay is sort of mediocre, but it does



A rather portly Roger Mellie (the man on the telly) starts the race. What he says next is not fit to be printed.

ALL IN THE WORS'

zine, selling well over a million copies with each issue. It's probably also the country's most controversial magazine. Half the population think it's utterly hilarious, the other half think it's disgusting, lavatorial and totally unfunny.

Who reads it, anyway? It's not really a kids mag (at least, their parents had better not catch them) - the language sees to that - yet you'd probably have trouble finding one kid in a whole school that has never seen a copy. Viz is also read by advertising executives, stockbrokers – and journalists.

The secret of Viz's success is that there are no depths to which it will not sink. The humour couldn't be in worse taste, the language couldn't be more explicit and the puns and double-meanings couldn't be more relentlessly

Viz: Love it or hate it, there is no way you

say so in the packaging, so you can't really complain about that. There isn't much to do and only diehard fans of the comic will see any lasting interest in this game. Or, as Roger Irrelevant would say, "Put a shine on that you flat-footed fiend and tell barky to stop humming!" trank

FIRST DAY TARGET SCORE

Finish the second race

VIZ VERDICT

GRAPHICS..... Nice, colourful, funny and 78% well animated

SONICS...... 70% Manic and eminently suitable tunes play throughout.

GRAB FACTOR..... 72%

STAYING POWER... 63% Plenty of novelty value, but not much variety.

Not too bad at all, but parents and prudes be



onstruction K

In a computer climate dominated by the idea of Virtual Reality, Domark may have come up with the best piece of software imaginable. 3D Construction Kit claims to include the ability to build a world and fill it with whatever you want. Does it live up to its promise? FRANK O'CONNOR investigates...

£25.99 cassette and disk • Domark/Incentive



• The great thing about the included game is that you can fiddle around with it by using the game as one of your own saved files. You can now mess around with the objects and buildings in the game. In this case, we floated a pyramid above the house (it made sense at the time).

ncentive has been pumping out Freescape games for years now. Freescape Is a 3D environment system using filled vectors to create a fairly realistic "world". The games were immensely entertaining, combining the "real feel" with brilliant elements of strategic and puzzle gameplay.

Now Domark and Incentive have teamed up to bring you the system which created it all. 3D Construction Kit is a user-friendly Freescape

Below, you see the three different panels

contains the bits you need all the time,

shape the objects you are designing.

controls. Under that, is the palette editor,

available in 3D Construction kit. The top panel

namely your viewpoint and actual movement

is the Edit panel. This is the panel you need to

environment designer. With it, you can build any object you care to think of (as long as it has no round edges); you can make a whole city, a car, an aircraft. The only real limits are your patience and imagination.

The first thing you'll notice upon getting your copy of 3D Construction Kit is the size of the box. Looking more like an expensive IBM business package than an Amstrad title, the box contains everything you need to get started.

Virtual Reality is a rather trendy name for a concept which has been around for quite some time. Early flight sims created a kind of Virtual Reality, giving trainee pilots a safe and realistic environment to fly a "virtual" aircraft in. As computing power and graphic handling improved, so did the presentation of the Virtual concept.

Only in the late-'80s did the idea really take off and people started to realise new and more complex applications for the idea. Virtual Reality, as we have come to know it, is a computer-generated

Included is a comprehensive but not overlong manual, one disk or two cassettes (depending on your machine) and a VHS video cassette. The package looks extremely professional and not a little daunting. The best advice upon opening the pack is... DON'T PANIC!

People deal with software in different ways. Some read all the instructions carefully before starting, others bung it straight in the machine and start experimenting. We would recommend the latter, but sooner or later you will have to refer to the manual.

Once loaded, you are presented with a menu. This allows you to choose from the following list of options:

- 128K Editor (main program for 128k machines)
- 64K Editor (two parts for 64k machines)
- The Freescape Compiler (arranges your construction into a fluid, working format)
- A disk formatter

Use the disk formatter first if you have a disk-based machine, as Kit files have to be saved onto a special format.

The main menu screen contains a panel of icons. The options these present include

environment. It doesn't have to copy the real world though. In fact, you can take the real world and turn it on its head.

The concept took a great step forward when computer boffins came up with interactive helmets and gloves. The helmets contained LCD display goggles and an array of sensors. These sensors detect movement in the wearer and send instructions to the computer, so that looking up, for example, changes the viewpoint on screen accordingly. The gloves work in much the same way, allowing the user to hold, pick

up or manipulate objects in a virtual world. The concept has been applied to full bodysuits, expanding the capabilities of the system.

Virtual Reality can be used for many things. It can be used as a tool for architects and city planners, for a start. Imagine designing a building and then being able to walk around in it before it's even built! Or planning road layouts and driving round them to check the traffic lights. The most sinister application of all, of course, is the military potential...

Pilots and tank drivers can be trained in extremely realistic scenarios. The pilots can turn their heads and watch through the "cockpit" as enemy fighters streak past and behind.

The idea of a Virtual office has been passed

around, too, allowing people in different countries to assemble in one "office" and conduct business meetings. Networking and modems would be required to bring this system into being, but the idea relies on processing power more than anything

These things would seem to be a long way off, but the fact is, there are already Virtual arcade machines up and down the country, running on Amiga-based systems (admittedly souped-up Amigas, but Amigas nonetheless). People who talked about this as a leisure pursuit for the twentyfirst century are now eating their words and looking forward to domestic virtual reality within the next

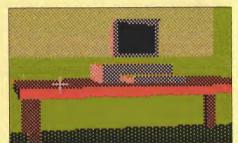


• The fly option comes is very useful indeed. It's kind of like a helicopter, whereby you can hover around at will.

Load/Save for the files you create. Those you use most are Create/Edit. Create, when selected, allows you to create a variety of two and three-dimensional objects. These include cubes, triangles, pyramids, lines and other polygons.

The objects in this menu all have set dimensions and appear in the same place when chosen. This is where the Edit function comes into play. Selecting Edit reveals a sub-menu, with a list of object-defining commands.

You can move the objects around in three



• This may look like a detailed and intricate object, but it's really just a set of shrunken. stretched and compressed cubes.

dimensions, stretch, shrink, rotate and turn. This means you can move a pyramid, for example, place it atop a cube and stretch it skyward. There are a decent range of colours available and shading an object is extremely simple. If the object is three-dimensional, you can colour

Colouring is simplicity itself. You select the shade option and a panel opens up beneath the standard control menu. On this panel are a selection of fairly simple shades. Clever programing allows eight colours in the normally four-colour mode 1. This selection has been further improved by stippling two different colours together to make an in-between shade.

3D Kit still isn't exactly exploding with colour, but there are enough shades to give realistic shadow and light sourcing. If you plan to make a large structure, say perhaps a village, then some careful thought about a light source will be required. A basic guideline is to decide where you want the "sun" - from then on, everything facing the sun is a bright colour. Object sides which do not face the sun are then shded in darker colours.

If you want to use the software as more than just an object designer, then your'e going to have to learn the complicated bit. 3D Construction Kit uses a very simple programming language to handle the more complex aspects of the program.

It looks a little like BASIC, but is actually a lot simpler. For example, collision detection allows you to destroy objects with a laser. The laser is activated by pressing the Spacebar. This brings up a secondary cursor on the screen. This cursor can be guided quickly and accurately to the object you wish to shoot.



• When 3D Construction Kit has loaded, you have in front of you an empty and barren world - the world is your oyster. Shades of megalomania here, as you prepare to build a world of your very own. The area has set boundaries to begin with, but you can change these in the conditions editor. It's time to start building vour universe...



● The first thing to be placed in the 3D world is a simple cube. This is chosen from a list of available shapes, both three and two-dimensional. The shapes include rectang triangles, lines, cubes and pyramids. It's up to you which object you define first, but always start with the largest – it makes finding you



• The cube was far too small for the purpose we had in mind, so, using the edit function, we stretched it upwards and outwards. To ensure its proportions were correct, we used the Fly option to levitate above the cube and view it from every angle. You can zoom around any object in this manner - the facility also appears in Freescape games.



• The object is starting to take shape at last. Having made the cube large enough, we set about adding detail to give this structure some purpose. A rectangle is chosen from the shape can be slotted into place. The rectangle too is stretched and then coloured using the palette

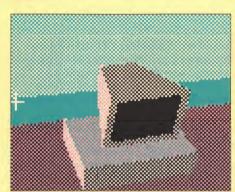


• Oops! Mistakes are easily rectified in 3D Construction Kit. For example, the rectanle was placed on the wrong side of the building and had to be shunted round a little. From this position, it can be flipped through 90 degrees until it fits flush with the side of the structure. The colour can be changed at any time and ven copied objects can be changed.



To give the object the ability to be destroyed, a typical line in Kit's object language would look something like this:

IF SHOT 4 2 THEN DESTROY 4 2 ENDIF



• A free game is included with the package. It's a shortish adventure involving a space shuttle, a computer and a large dose of explorational ability.

It doesn't take long and it's a fairly logical and intuitive system. The main difficulty you'll come across is spatial awareness. It can be difficult knowing exactly where you and the objects you are building are at any particular time. Fortunately, a plan view is available from the main menu. Mapping larger complexes of buildings and structures is definitely advisable; the program itself gives correct coordinates at all times, displayed in a bar below the main screen.

The control panel is a joy to use. The arrow pointing forward obviously moves you forward. The arrow pointing up is similarly logical. This is also true for the slightly more complicated edit screen. This time the arrows represent STRETCH, MOVE, SHRINK, POINT and TURN.

Viewing the structures is also simple. A little "eye" icon is displayed, with a facility to look up or down. Clicking on the main "eye" returns your viewpoint to the horizon.

If you don't feel confident about building something from scratch, there is another way: Load up the included game demo and try messing around with the objects in that. These are already endowed with the more complex attributes of the program and can be redesigned until they are almost unrecognisable.

ରର ଏହେ ଏହେ ଓଡ଼େ 🕏

 The object has to be checked thoroughly. • The building is now almost complete. The windows are simply yellow squares. Only one was designed - the rest were copied from the One of the problems with 3D Construction Kit is the origin point of recently created objects They are often obscured by larger objects and have to be found before you can do anything original and placed relatively easily in a nice regular pattern to form windows. What you have here is a palette problem. We finally with them. In this case, a square has gone astray and is currently on the other side of the found colours for the AA logo, however, that looked reasonable

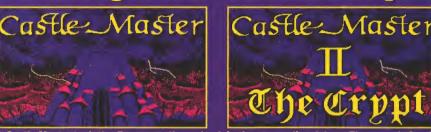
simple, quick and efficient



uld be hard pushed to tell the differen now (it's a hard life at AA, you know).



The Legend of Freescape



Castle Master took the Freescape theme back in time to medieval days. The so
Master 2: The Crypt, hasn't been available in the shops – until now. It can be bou
of the Virtual Worlds compilation just published by Domark/Incentive.

A long time ago, in a galaxy far, far away a software house called Incentive decided that Pac Man and Space Invaders just weren't, well, real enough.

"We don't want to just see the maze, we want to be there!". And so they put on their special programming pants and sat down to revolutionise the games industry...

Driller was the first of the Freescape programs and arguably the best. It borrowed the 3D concept • Total Eclipse was the from lots of different sources. Flight second Freescape game, set ments and maybe even program sime had been using polygons for this time in an Egyptian another Driller sims had been using polygons for pyramic years, but they weren't particularly

detailed and increased size meant reduced speed. Incentive invented new coding techniques to get the thing running. It was fast. It was big. It was They released the game on just about every for-

incredible adulation. "Do it again", cried the world. "We want some

mat known to man and it was greeted with

more of those spanky Freescape games." The second Freescape title was Total Eclipse and although it looked and played similar to the first game it was bigger, it was faster, it was better.

Disk users will have to use the special Kit

The program reeks of quality. Expensive it

Enough of the theory. We set out to create

formatter to save their designs, but tape users

have an easy time of it. The multiload on tape is

may be, but 3D Construction Kit is easily the

most innovative piece of Amstrad software ever.

our own skyscraper using 3D Construction Kit.

(See the accompanying walk-through.

The crowd went wild and the Freescape games went on to become one of the biggest success stories in software history.

Incentive then joined up with games publisher Domark to release Freescape game number three - Castle Master, a medieval romp through the rooms and vaults of an ancient castle.

> Now Domark/Incentive has come up with the 3D Construction Kit. You can create your own 3D environanother Driller...

 All three previously-released Freescape games plus a fourth, Castle Master II: The Crypt are being sold as part of the new Virtual Worlds compilation from Domark/Incentive. Look out for the review next issue!

Driller, the first of the Freescape games, is nov considered a true

GOOD NEWS

- Incredibly flexible design tool
- Wonderful piece of original programming

BAD NEWS

Daunting instruction manual

Verdict 95%

we built from scratch an exact replica of the imposing *Amstrad Action* skyscraper. You between this and the real thing. It only takes time and patience to define the company

RIBBONS

ALL TOP-QUALITY UK BRANDSI

Amstrad			
PCW 8256 Fabric LONGLIFE	2741LL	€4.95	D4 C
	* 2741Col	£4.95	Band C Band C
PCW 8256 Multistrike Films	2741MS	₹3.95	Band B
PCW 9512 Fabric LONGLIFE	2746LL	₹4.95	Band C
PCW 9512 Fabric colours	* 2746Col	€4.95	Band C
PCW 9512 Multistrike Films DMP 2000/3000/3160	2746MS	€3.95	Band B
DMP 2000/3000/3160	2482FN	£3.95 £2.95	Band A
DMP 4000	2426FN	€5.95	Band D
LQ 3500	2741LL	€4.95	Band C
Others			
Brother M1009/1109/1209	2412FN	£4 05	Band C
Commodore MPS-803	2412FN	£4.95 £4.95	Band C
Canon PW 1080A	2223FN	£4.95	Band C
Citizen 120D/180E/LSP-10	2488FN	£3.95	Band B
Citizen MSP-20/40/50	2477FN	Z4.95	Band C
Citizen HOP-45	2478FN	£6.95	Band E
Citizen Swift 24 pin	2488DN	£4.95	Band C
Epson FX/MX/RX-80/LX-800	2273FN	€3.95	Band B
Epson LX/GX-80/LX-86/90	2454FN	€4.95	Band C
Epson LQ-400/500/800/850	2477FN	€4.95	Band C
Epson EX-800/1000	2774FN	€4.95	Band C
Epson MX/FX-100/1000/1050	2320FN	€4.95	Band C
Juki 6100 Dalsywheel	2563MS	£3.95	Band B
Mann/Tally MT80/81	2698FN	€4.95	Band C
Mann/Tally MT85/87	2739FN	€4.95	Band C
Mann/Tally MT86/88	2740FN	₹5.95	Band D
NEC PinwriterP1/P2/P6	2254FN	€4.95	Band C
NEC PlnwriterP2+/P2200	2844FN	₹4.95	Band C
NEC P6+/P7+	2870FN	€5.95	Band D
Panasonic KXP 1081/1090	2228FN	€4.95	Band C
Panasonic KXP 1180	2905RD	€4.95	Band C
Panasonic KXP 1124	2904RD	€4.95	Band C
Seikosha GP 100	2317FN	€3.95	Band B
Selkosha SL 80/SP 1000/1200	2741FN	£4.95	Band C
Selkosha GP 500/550	2236FN	€4.95	
Shinwa CP-80	2698MS	£4.95	Band C Band C
Star LC-10/NX 1000	2861FN	£3.95	Band B
Star LC-10 4 colour	2869Col	£5.95	Band D
Star LC-24 10 Star NL-10	2868FN	€3.95	Band B
	2761FN	£4.95	Band C
* new! CC		JRS	*
CITIZEN 1200/180F/I SP-	1 (174880)	£49	5 Rand C

CITIZEN 120D/180E/LSP-102488 EPSON FX/MX-80 2273 EPSON LX/GX-80/86/90 2454 NEC P6+/P7+ 2870 SEIKOSHA GP 500A/550A 2366 STAR LC-10/NX 1000 2866 STAR LC-24 10 28680 Band (2273Col 2454Col Band I Band I Band I 2868Col Band [COLOURS AVAILABLE ARE - Blue/Brown/Red/Green Buying more than one? 2 - OFF

Price Band A £7.45 £8.95 Price Band B Price Band C £1 9.95 £10.95 £12.50 Price Band D Price Band E £22.95 £27.80

If your ribbon is not listed - please enquire WE CARRY RIBBONS FOR 800 DIFFERENT PRINTERS Laser cartridges, ink-jets etc also stocked

AMSTRAD TOP 20

cost effective computing starts here. . .

computer

RE-INKING order 20202-666155 fax line: 0202 - 668208

	PAREN	
BEST QUAL	ITY white, wood free - LOV	V DUST specification
11x9.5°	60gsm FANFOLD LISTING	2000 £13.95
11x9.5"	70gsm MICROPERFORATED	2000 £15.95
11x9.5"	85gsm LETTER QUALITY	1000 £10.95
A4 size	70gsm MICROPERFORATED	2000 £19.95
A4 size	85gsm LETTER QUALITY	1000 £11.95
11x9.5"	NCR 2-PART PLAIN	1000 £21.95
11x9.5"	NCR 3-PART PLAIN	700 £24.95
and of co	urse there's our own UNIQUE	A5 continuous paper
A5 size	80gsm LETTER QUALITY	1000 £11.95
ADDIACE	DI FACE ADD (FAC TO AND	4 00 DED TOD DADED

DD £5.00 TO ANY ORDER FOR PAPER

LABELS

Fanfold LABELS from AVERY Standard address size available 1 or 2 across 3.5° x 1.5° . . . £3.75 per 1000 many other sizes stocked - please enquire

CARRIAGE:- PLEASE ADD £2.50 TO ANY ORDER FOR LABELS DISKS

FREEPOST

Poole Dorset BH15 2BR

2 0202 - 666155

VISA

BENCHMARK - SENTINEL "Need we say more!" 5.25" DS/DD HD 1.2MB 25 for just £13.95 10 for just £11.95 50 for just £24.95 25 for just £24.95 HD 1.44MB 3.5" DS/DD 10 for just £11.95 10 for just £23.00 25 for just £24.95 25 for just £47.95

and for the AMSTRAD CPC/PCW: 3" MAXELI CF2 suits all 3" drives, single or double density

The very best HIGH GRADE disks 5 for just **£11.50** 10 for just £21.95 20 for just £48.40 plus FREE. . LOCKABLE DISK BANK (holds 20+) WORTH £9.95

RE-INK

Still throwing your old ribbons away?

Now there's

Simple, easy re-inking at home!

One can will Re-inK up to 30 ribbons or top-up 100+!!

inc vat

I Completely ozone-friendly

I Contains NO propellants of any kind I Recyclable aluminium can

I Superb quality dense black ink

FABRIC RIBBON

FORMULA

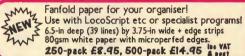
product from OFFICE-21

O,

All fabric ribbons have press-on tops . . Just lift off the top, spray on a teaspoonful or two of ink and leave to dry.

For CLEAN, CLEAR, BLACK PRINT . . again and again . . .

PERSONAL ORGANISER PAPER



ALL OUR PRICES INCLUDE VAT same day despatch + 1st class delivery ALL ITEMS FREE DELIVERY except Paper and Labels

HOW TO ORDER

DELIVERY PAPER + UK MAINLAND ENVELOPES LABELS EVERYTHING B ELSE order by FREEPOST . . . or at our SHOP CASPELL COMPUTER OPEN 9.30 to 5pm MON/SAT Dept AA 1 New Orchard 3/5 DAY SERVICE £5.00 £2.50

NEXT DAY SERVICE £10.00 £10.00 £10.00 PERSONAL CALLERS OVERSEAS (optional insurance)
Free of Charge (of coursel)
Surface shipping at cost

PAYMENT CHEQUES - made payable to CASPELL COMPUTER VISA and ACCESS POSTAL ORDERS

COPIES OF OUR TERMS OF TRADING ARE AVAILABLE UPON REQUEST. ALL OFFERS ARE VALID FOR 28 DAYS

POOLE

BH15 1LY

Gremlins II

Robocon

Mini Office II.

North & South

NARC.

Loopz.

PROTON SOFTWARE

FUN ONES

Call for special offers: Hotline: 0462 686977

	CASS	DISK		CASS	DISK
Dizzy Collection	7.75		Sim City	9.99	13.99
Turtles	8.99	12.99	Jack Nicklaus Golf	8.99	12.99
Big Box	12.99		Man United	4.99	8.99
Total Recall	7.99	12.99	Man United II	9.99	11.99
Lotus Esprit	8.99	11.99	F16 Combat	11.99	14.99
Power Up	11.99		Fun School 3 (all ag	es).7.99	10.99
Golden Axe	8.99	11.99	Monty Python	7.99	10.99
Hollywood Coll	11.99	14.99	Jahangir Khan Squa	sh .8.99	10.99
Back to Future III	8.99	12.99			
Gazza II	8.99		CARTR	IDGES	
Kick Off II	8.99	11.99	Robocop II		23.50
Multi Player Soccer			Wild Streets		
Manager	7.99				
Monaco Grand Prix.			Op Thunderbolt		23.50
Monaco Giano Fiix.	0.99	12.33	Due Temple Terre		00 50

7.99 -- --

..8.99 11.99

..8.99.....12.99

..11.99.....14.99

..8.99.....12.99

..8.99.....11.99

Toyota Celica8.9911.99 Dick Tracy ..

nobocop II	.23.0
Wild Streets	.27.5
Op Thunderbolt	.23.5
Pro Toppis Tour	23 5

27.50
.23.50
23.50
.23.50
.23.50
.27.50
.27.50
.23.50
.27.50

* SPECIAL OFFER *

Captain Blood Amstrad Disk £3.99 Teenage Queen Amstrad Disk £3.99

Cheques/PO's to: PROTON SOFTWARE, ENTERPRISE HOUSE, BLACKHORSE ROAD, LETCHWORTH, HERTS, SG6 1HL. Tel: 0462 686977 24 hour. Fax: 0462 673227

Programs that utilise the tried and trusted methods of the professional, not pie in the sk neories that fail to pass the test of time

FOOTBALL BOXFORM Written by a former pools expert for Littlewoods. The program has forecast over 50% more draws than would be expected by chance. Home and draws shown in order of merit and true odds given for every match. Merit tables show at a glance the teams currently in form and those having a lean spell. Australian Pools program

SUPER PLANNER
by the same author, full details given of OVER 400 ENTRIES covering up to 57 selections. Includes SINGLE AND MULTIPLE entries of LIT PLANS 1, 2, 9, 25, 27, 28, 29, 47, 48, 49, 50, 79, 80, 81, 82, 83, 84, 95, 100, 200, B37, B38, B39, B49, B50, B54, B58, B59, B145, B180, V-Plans 20, 42, 43, 44, 83, 84, 85, 87, TIP TOP 10 & 15, EXPRESS 35 & 38, MAIL 60, 75, E, P, MIRROR 1 & 8, FULL PERMS 8 from 9 to 8 from 14. All FULLY CHECKED in seconds by your computer. Not just the highest scoring but ALL POSSIBLE WINNING LINES.

POOLS PLANNER Similar to above but covering block permutations using Littlewood standard guarantee blocks.

RACING BOXFORM Course characteristics (built into the program) as well as the form the horses are considered in speedily producing an order of merit for each race. Designed for flexibility allowing users to amend the program if they wish. Price still includes the highly acclaimed HANDICAP WINNER - more than 1000 winners every year - over 25% of them at

PUNTERS PARTNER Works out almost any bet...doubles, trebles and accumulators including mixed stakes, yankee type to 8 selections, patent, union jack, up & down (if cash bets) single & double stakes, round robins, rounders, roundabouts, round the clock, Win or each way. Covers non runners, rule 4, dead heats. Versatile multiple odds calculator for fixed odds bets and the lines required for any full perm you're likely to meet.

PRICES. (Tape) £16.95 each. £25.95 any two. £34.95 any three. For disks please add £2

SPECIAL OFFERS FOOTBALL BOXFORM, RACING BOXFORM & PUNTERS PARTNER...£27.95 TAPE, £31.95 DISH

FOOTBALL TOOL KIT Football Boxform, Super Planner, Pools Planner, Punters

RACING TOOL KIT Racing Boxform, Punters Partner plus 4 further programs which enable you to keep your own records or produce and amend form and time ratings...£33 TAPE, £38 DISK.

BOTH THE ABOVE KITS...£55 TAPE, £62 DISK.



Advertised for six years in the sporting and computer press **BOXoft CLEVER..GET THE BEST**

Please make cheques or Postal orders payable to BOXOFT (AA), 65 Allans Meadow Neston, South Wirral L64 9SQ Tel: 051-336 2668

CMD 64/128 PCW **SPECTRUMS**

CPC

Subscribers Club

You not only receive an ace gift when you subscribe - you can also take advantage of our exclusive subscriber offers! An extra bonus or what? Just you take a look!

This month's special offer to subscribers is.



rom US Gold – excellent role-playing arcade action in the latest in the classic Gauntlet series.

Subs Club Price CASSETTE £8.99 (RRP £11.99)

Receive one of you subscribe



GAZZA

Play one of the fastest, most exciting Amstrad football games you can get. frantic end-to-end footie action!



THE ADVANCED OCP ART STUDIO

Simply the best art program around for the Amstrad! Comprehensive and easy to Never mind the rules, just get stuck in to the use, it's packed with features and is icon

- The package normally retails for £22.99 but
- this special AA version is yours as a gift!
- Disk only. 128K memory required.
- Mouse not included.

ISSUES

SSUES 1-50, 52, 54, 6, 57, 58, 59 ARE SOLD OUT

OTHER ISSUES VAILABLE 51 · £1.45

Batman and Powerdrift get the treatment, PC Show report, RSX LIB Nirvana and Sprites Aliv

53 · £1.45 PROMs feature, PD olumn begins plus an wesome Batmap

> FOR UK ONLY Overseas prices: Europe £5







console and Plus









Part 1 of the AA end-







Robocop II on the



The first part of our No less than four



win AA's most prized accolade.



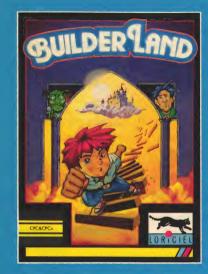
ISSUE 66 • £1.60 ISSUE 67 • £2.20 ISSUE 68 • £2.20 ISSUE 69 • £2.20 ISSUE 70 • £2.20 Learn how to be an





Hero Quest and 3D Ouest, Z80

these superb gifts when to Amstrad Action



BUILDER LAND Guide Melba to safety

across a hazardstrewn landscape in Loriciel's challenging scrolling puzzle game



Just look at all the benefits you

You get it delivered

get when you subscribe

You receive one of these

You can cancel your subscription at any time in the future and we will refund you in full for all unmailed issues. No quibbles, no risk!

All this for the same price you pay at a newsagent!

RETURN THE COUPON BELOW RIGHT AWAY OR CALL OUR CREDIT CARD HOTLINE ON 0458 74011

12 ISSUES	□ UK £26.40	EUROPE £46.40	REST OF WORLD £71.40
	To ensure you receive	your magazine and tape quickly and	l undamaged, all overseas subscriptions are sent Air Mail
MY CHOICE OF GIFT IS TICK YOUR CHOI	GAZZA II	BUILDER LAND	ADVANCED OCP ART STUDIO
PLEASE ALSO SEND ME THIS MONTHS SU	BS CLUB SPECIAL OFFER - GAU	NTLET II 🗀 DISK £11.99	CASSETTE E8.99
f you are an existing subscriber plea	se quote your subscription	n reference number here - you	will find this on your address label
PLEASE ALSO SEND ME THE FOLLOWING	BACK ISSUES PLEASE INDICATE		
MY METHOD OF PAYMENT IS TICK YOUR	CHOICE TOTAL PAYMENT	£	
VISA ACCESS CARD NO			EXPS CHEQUE Make payable to Future Publishing Ltd
IAME			SIGNATURE
ADDRESS			
ADDRESS	*		
			POST CODE -

Fun School Over 7s

The Over 7s pack is the third in the Fun School 3 series. Perilously close to reaching the frontiers of knowledge, FRANK O'CONNOR tries out Database's educational program for older kids...

£12.99 cassette, £16.99 disk • Database Software

Wordsearch



This game takes the format of the hidden word puzzle games so popular in those little newsstand puzzle mags. You simply look at a grid of letters and find the required word in amongst the melee. Once found, you highlight the first and last letters to select the word and see if you were right.

Robot Draw



This game is a bit more complex. You guide a robot around the screen using a computer language very similar to LOGO. You use the robot to draw shapes, and you can configure his movements to include shapes such as circles and squares. This is probably the most

Planet Maths



A sum (representing a spacecraft!) floats towards a dangerous-looking laser wall at one end of the screen. To avoid collision you have to solve the sum. You can alter the difficulty depending on the child's age. The basics of addition, subtraction, division and multiplication are covered in this section.



You play a pirate looking for buried treasure. The computer feeds you a list of instructions and coordinates which you follow until you find the stash of loot. This is possibly the easiest of the sections... only it's also the dullest too, though it does have direct

Database



This is a simple database allowing input, saving and printing of records. The novel twist is that it tests your memory by asking you the title of various records. Easy at first, but the more you enter the harder it gets. This section is directly relevant to kids planning a future in the information technology industry!

Sentences



This section tests both grammar and spelling by asking you to correct a wide range of different (faulty) sentences. You have to check all of the punctuation and spelling, as well as watching out for missing capitals and inappropriate words. This section in particular is very impressive and quite involving

ast month, we reviewed the 5-7s version of this excellent educational package, this month we take a look at the over 7s version. The age group that this covers is a little wider, especially bearing in mind the fact that much of the program deals with creative work. The academic aspects are governed by the

The program, as in previous versions, is split into six sub-games. All of these focus on various aspects of education, firmly targetted at the abilities of over-7s. The games cover such diverse topics as spelling, grammar, arithmetic and even computing in general.

The bottom line is that the Fun School series includes some of the most demanding, attractive and entertaining educational software there is. This edition is no exception.



 As with all the Fun School 3 series, the opening screen lets you select any of the six program modules.



GOOD NEWS

- Flexible skill levels
- Intuitive control method
- Superb presentation as ever

BAD NEWS

- Painful mult-load on tape
- One rather dull section

VERDICT

Cheat Mode

AA's cheating section is crammed with goodies for anyone having trouble in a game:

- Pokes (the listings) let you hack into the game code to give yourself extra lives, fuel and more
- Multiface pokes (these follow the listings) are even easier to use for those people

who own those little black boxes

- Keypress cheats are put in by programmers to help the playtesters and then left in - they're often just there to be found...
- Passwords and solutions are sent in by dedicated gamesplayers who want to share their hard-won knowledge

QUATTRO FIREPOWER

3D STAR

FIGHTER

OPERATION

Address

8D5F

8D53

85B1

{BsAw} 130 · POKE · x . a : chk=chk+a : NEXT

{Irax} 140.TF.chk()&1546.THEN.170.

{Crar} 150 · MEMORY · & 2FFF : LOAD""

{NrAs} 170 ·PRINT"Error · in · poke"

00

00

00}

99}

Poke Effect

Inf. bombs

Inf. bullets

Invuln.

{Ltao} 160 · CALL · & BERRO

Terra Cognita

It's compilation time again, and the unstoppable Andy Price has whipped up yet another set of cheats, this time for the next in the range - the firesome foursome, Codemasters' Quattro Firepower. On the Terra Cognita cheat you need to wind the tape past the first file, TERRA-COGNITA, (CAT the tape)

MIG 29

Mig 29 Soviet Fighter

{MpAv} 1.'.Mig.29.Soviet.Fighter {LuAs} 2.'.Quattro.Firepower

{FsA.i} 3.4

{Hiar} 4.'.by.ANDY.PRICE {FuA.i} 5.4

{EwAr} 10.DATA.2a,38,bd,e5,ac,e1

{IoAu} 20.DATA.22.2b.be.ad.21.37 {HkAt} 30.DATA.bd.3e.c3.77.23.3e

{EsAu} 40.DATA.23,77,3e,be,23,77

{Isat} 50.DATA.21.40.00.e3.11.00 {GqAu} 60.DATA.bb.00.c3.4a.3a.af

{Okas} 70.DATA.32,c8,08,32,f1,0c {NrAq} 80.DATA.cf,00,00,00,00,00

{MxAr} 90.FOR.x=&BE00.TO.&BE2C

{NtAt} 100 READ as:a=VAL("&"+a\$) {PoAv} 110 · POKE · x, a : chk = chk + a : NEXT

(JrBi) 120. TF. chk() \$116D. THEN: 150.

{AnAs} 130 · MEMORY · & 2FFF : LOAD"" {JpAn} 140.CALL.&BERR

{LnAr} 150 · PRINT"Error · in · poke

Address	Poke	Effect
)8C8	00	Inf. lives
CF1	00	Inf. fuel

Operation Gunship

{NjAq} 1.'.Operation.Gunship {LuAs} 2.'.Quattro.Firepower

(FsA.i) 3. {Hiar} 4.'.bu.ANDY.PRICE

{FuA.i} 5.

{EwAr} 10.DATA.2a,38,bd,e5,ac,e1 (MvAv) 20.DATA.22.35.be.ad.21.37 {HkAt} 30.DATA.bd,3e,c3,77,23,3e

{EsAu} 40.DATA.23,77,3e,be,23,77 {Isat} 50.DATA.21.40.00.e3.11.00 {GqAu} 60.DATA.bb,00,c3,4a,3a,af

{MoAs} 70.DATA.32,9b,8e,32,5f,8d {NrAu} 80 · DATA · 32,53,8d,32,b1,85

{LkAp} 1.'.Terra.Cognita {JsAv} 90.DATA.3e,41,3e,50,cf.00

{LuAs} 2. '.Quattro.Firepower {LpAq} 100.DATA.00,00,00,00,00,00 {JsAs} 3.'.method.2..skip.first {BqAs} 110.FOR.x=&BE00.TO.&BE36 {BnAu} 4.'.file."terra-cognita" {PxAu} 120.READ.a\$:a=UAL("&"+a\$) {FuAj} 5.

{Hkar} 6.'.by.ANDY.PRICE

{FwAi} 7.

{KpAu} 10.OPENOUT"":MEMORY.999: INK -0.26

{KpAt} 20.BORDER.0:INK.1,0:MODE.2 {MvAt} 30 . LOAD"!", &COOO:LOAD"!",

{AiAu}

40 · LOAD" !", 20000 : POKE · &19AE,

(Mran) 50 · CALL · 1004

AddressPoke Effect 19AE 00 Inf. lives

3D Star Fighter

{Niar} 1.1.3D.Star.Fighter {LuAs} 2.'.Quattro.Firepower (FsA.i) 3.1

{Hiar} 4.'.by.ANDY.PRICE

{FuAj} 5.'

{Owar} 10.FOR.x=&BE00.TO.&BE2B {JvAv} 20 · READ · cd\$: cd=VAL("&"+cd\$)

(E.iAp) 30 · POKE · x . cd : NEXT

{JgAs} 40.DATA.ED,5B,38,BD,E5 {IxAp} 50.DATA.AC.E1.ED.53.2D

{KoAs} 60 · DATA · BE, AD, 11, 37, BD {BwAu} 70.DATA.3E,C3,12,13,3E

{PpAg} 80.DATA.25.12.3E.BE.13 {Huar} 90.DATA:12.21.40.00.E3

{Nuar} 100.DATA:11.00.BB.00.C3 {Ptar} 110.DATA.4A,3A,41,50,00 {EuAs} 120.DATA.AF, 32, 3A, 7F, 32

{CxAs} 130.DATA.15.7F.00.00.00 {EwAo} 140 . POKE . &BE2C, &CF

{Crar} 150.MEMORY.&2FFF:LOAD"" {Ltao} 160.CALL.ABERR

Address Poke Effect 7F3A 00} Invuln. 7F15 00}

If it's worrying you that the pokes in Cheat Mo just look like a jumble of signs, squiggles and numbers to you, fear not, that's just what they They're programs written by specialists to take if control of loading function, alter, and then start if game. What you will need to do, should you wa

- Make sure the routine is written for your for mat - disk or tape - they will not genera
- Type it in to the computer, making sure then are no errors.
- Typing in routines is always prone to error

so here's some help: The funny numbers within the "{ }" bracks the left of the lines are NOT to be typed in but are code produced by the TYPEWRITER program printed periodically in Amstrad Action. (it was a the covertape with AA67 and AA68). It checks e line as it is typed in and produces a code which can be compared with that printed. You don't ha to use the TYPEWRITER program, but it's rec

All SPACES in the lines have been i printed dots, the idea being that it makes them easier to see. See a DOT? Type a SPACE!

Quite often the routine itself will have a built-check on the DATA numbers and will tell you if or of them is typed in wrongly. User-friendly or what

Save the program to tape or disk (not the game tape or disk!) so that it can be use

Put in the game tape or disk and type ITAP

Type RUN to run the routine (not RUN (CTRL+ENTER) as you normally would

You should find that the game will load normal or you will be given instructions on what needs t

EDITION ONE

The tape compilation receives infinite lives all round from our man in Street, Graham Smith. This is an "all in one poke" for the four games. Gemini Wing, Double Dragon, Vigilante and

A CLASSIC

COLLECTION

TOP TEN.

ULTIFACE MAELSTROM

Mulholland of Belfast, Tom Stevens of Tonbridge, and Tue Anderson of Helsinge...

C9 Super jump

Walk on water

fish and traps

Inf. snorkle

Inf. shields

Inf. time

Inf. time

Inf. lives

Inf. lives

Can't die

Inf. lives

Inf. lives

Inf. credits

Inf. lives

Inf. lives

Extra lives

Inf. time

Inf. Oxygen

Inf. Bullets

Inf. lives

Inf. ammo

Inf. lives

No hadstars

Inf. lives

Inf. energy

Invulnerability

Can't die from bombs

Invulnerability

ADDRESS POKE EFFECT

ดด

003

00

gg

00

aa

00

47

FF}

A73

473

FF

(t) F7B3

FE9B

0093

0135

1054

(t) A300

(£) 13CB

(t) 1C90

(d) ØB1A

(d) 8C2B

(t) 54F4

(d) 8B84

(t) 8316

(t) 8A58

(t) 05E9

(t) 914A

(t) AB2C

(t) 5308

(t) A3A4

(t) 4DA3

(£) A282

(t) 6B36

878E

ABC7

8CF4

9200

6030

A103



COMPILATION {IvAw} 1.'. Edition.one-By. Graham. Smith (RrAw) 2.'. Infinite lives . (tape) {DkAu} 3.'.Save.to.tape, not.disc (Ftail 4. {CxAx} 10 . DATA . 06.00.11.11.11.cd.77.bc {OmAu} 20 . DATA . d5, eb, cd, 83, bc, cd, 7a, bc

NAME

Magicland Dizzy

Arctic Fox

Dragonnin.ja

Cauldron 2

Vigilante

Dynamite Dux

Mystery on the Nile (t) 0408

Booty

Chala

West Bank

Boulderdash IV

Devils Crown

Fly Spy

Gyroscope

Metal armu

Technician Ted

Moving Target

Shadow of the Beast (t) 2920

Caba l

{FnB.j} 30 · DATA · 3e, 01, cd, 0e, bc, d1, 7b, fe

(C.jax) 40. DATA 84.20.12.21.23.he.22.hc

ART THE

FOUR

FANTASTIC

GAMES ON ONE UNIQUE

{OuAw}	50 · DATA · 03, eb, e9, cd, cb, 03, 21, 00
{HjAv}	60 · DATA · c3, 22, 2a, 08, c9, fe, ac, 20
{CxAw}	70 · DATA · 05, 3e, 73, 32, 43, be, 3d, e6
{AjAx}	80 · DATA · 07, 32, 56, be, 21, 16, bd, 36
{DvAw}	90 · DATA · c3,23,36,49,23,36,be,eb
{MoBi}	100 DATA · e 9, 21, 52, be, 22, e0, a8, c3
{FxBi}	110.DATA.08,a6,cd,47,a8,18,00,21
{BwB1}	120 DATA 65, be, 22, 78, a9, c9, 21, 6c
{BkBi}	130 DATA be, 22,61,a9,c9,af,32,69
{AnAu}	140 DATA 4d, c3, fe, 99, af, 32, 3b, 44
{JuAw}	150 DATA · c3, 15, 58, 21, 7c, be, 22, e9
{01Ax}	160 DATA a8, c3, 10, a6, cd, 50, a8, 21
{JiAv}	170.DATA.86,be,22,43,a9,c9,21,8f
{LoAx}	180 DATA be, 22,09,0a,c3,c4,09,af
{ItAu}	190 · DATA · 32, eb, 4c, c3, e4, 0c
{EnAt}	200 · FOR · j=48640 · TO · 48789 : READ · a\$
{KtBj}	210 x=VAL("&"+a\$):y=y+x:POKE.j,x
{OtAt}	220 · NEXT : IF · y <> 17285 · GOTO · 240
{MqAo}	230 · CALL · 48640
{CpAq}	240 · PRINT"data · error

Address	Poke	Effect
Gemini Wing		
443B	00	Inf. lives
Double Dragon		
4CEB	00	Inf. lives
*** **		
Vigilante		
5816	00	Inf. lives
Silkworm		
082A	00}	Inf. lives
082B	00}	

The

Multiface

WCLY
The (t)s and (d)s before the

address indicate whether the

poke was written for a tape or

disk game (they might work on

both, its worth a try). Just in case

you don't already how to put in

these BLACK BOX POKES, here

are the steps to success.

MULTIFACE.

c Press "T" for tool.

select the code.

acters ie. 3A7C)

i Press "RETURN"

input.

ie. A7)

goto (f)

a Load the game as normal.

b Press the RED button on the

d Press "*" to make sure you

e Press "H" for HEXADECIMAL

g Type in the ADDRESS (4 char-

h Type in the POKE (2 characters

i If there is more than one poke

k Press "ESC" back to the menu.

I Press "R" return to the game.

f Press "SPACE" for input.

MR HELI

Mark Smith from Glusburn and Tom Stevens from Tonbridge have discovered the passwords for levels 2 and 3 of Mr Heli.

Level 2 - CACSFAAAAUAEDIADCKCY Level 3 - DECIHAFAAUAISAADCDBR

SUPERCARS

RWJ Bain (very formal) form Yarm in Cleavland and Jamie Murray of Lesmahagow have supplied the passwords for classes 2 and 3 of Gremlin's Supercars they are ODIE and BIGC, type them in on the track selection screen.

COMBAT ZONE

Mark Richardson of Craigshill in Livingston has found a nice little keypress system of cheats built into Combat Zone, recently re released on

the Alternative's 4 Most Action compilation. Press CLR to pause the game (it will say PAUSED on the screen) Then press the keys SHIFT, CAPS LOCK, and TAB, a sign will tell vou the Cheat Mode is ready. Then keeping your fingers on SHIFT, CAPS LOCK, and TAB. Pressing S changes the scenery, pressing H initiates a Smart bomb system (Space). "I" ups the lives to 255, and "F" ups the fuel. A sign on the screen will tell you that the cheat mode has been activated

William Huddleston from Innerleithen in Scotland suggest that for infinite lives in **Back to** the Future 3 type the following during play:

Level 3: LOW DOWN CHEAT

ΔΔ

BACK TO THE FUTURE 3

Level 1: ROTTEN CHEAT Level 2: LOUSY CHEAT

Here are the codes for all the evels in US Gold's game Night Shift from William Huddleston up in Innerleithen (I may never eat a fruit salad again)

- 2 cherry/banana/banana/lemon
- 3 banana/cherry/pineapple/blueberry
- 4 pineapple/lemon/pineapple/pineapple
- 5 pineapple/pineapple//lemon/cherry 6 cherry/blueberry/pineapple
- 7 cherry/lemon/pineapple/banana8 pineapple/banana/pineapple/cherry
- 9 pineapple/lemon/lemon/cherry
- 10 lemon/banana/blueberry/blueberry
- 11 banana/pineapple/cherry/blueberry12 cherry/blueberry/banana/blueberry
- 13 blueberry/cherry/banana/pineapple

CHEAT MOD

- 16 banana/banana/pineapple/banana
- 17 banana/blueberry/cherry/blueberry
- 18 blueberry/lemon/lemon/blueberry
- 19 lemon/pineapple/cherry/blueberry
- 20 cherry/pineapple/pineapple/cherry21 lemon/cherry/pineapple/pineapple
- 22 blueberry/lemon/cherry/banana
- 23 blueberry/cherry/cherry/lemon24 blueberry/pineapple/lemon//lemon25 banana/pineapple/pineapple/lemon
- 26 blueberry/cherry/cherry/banana
- 27 banana/cherry/lemon//banana
- 28 blueberry/banana/banana/pineapple
- 29 cherry/blueberry/cherry/pineapple 30 cherry/cherry/banana/blueberry

ROCK STAR ATE MY HAMSTER

Matthew Bayfield from Gravesend in Kent has completed the Codemasters Gold game Rock Star Ate my Hamster, and sent in some hints and tips to get you a bit further along the road to stardom in this absorbing game.

Selecting Rock Stars

- Always select four Rock Stars.
- You can afford to pay wages of up to #30,000. Pick one for around #15,000, one for around #10,000, one for around #1,000 and Sidney Sparkle for #50
- Each star will have a different temperament - Stars to be avoided include: Maradonna, Izzy, Asbeen, Rotton Johnny, Dorrissey, Alison Nightmare and Lumme.

Getting Started

- Keep the band name suggested by Clive.
- Buy dodgy gear, this will get confiscated by the police later if you become successful enough, but by then you will be able to afford brand new stuff.
- Follow this pattern to get going:
- Gig... Universities... Charge #15 for 4 nights Gig... Clubs...... Charge #10 for 4 nights Gifts Food (BILL 4x #50=#200)
- Gig... Universities... Charge #10 for 5 nights Gig... Clubs...... Charge #10 for 4 nights Gifts Food (BILL 4x #50=#200)
- If during this period any of the stars ask for anything they are not a good choice.
- Continue gigging in concert halls, and charging #10, for 4 nights until you fill them. Give the stars gifts after every 2
- Once you have filled the concert halls, move cautiously up to stadiums, charging #10 for 7 nights, continue giving gifts every

Record deals & sponsorships

- Refuse all sponsorship, e.g. Lievie Jeans, Soma Electronics.
- Accept the record deal worth #50,000 + 20% royalties. Ignore others.

Once you have accepted a deal you can record an album.

Recordina

- Choose a 48 track studio (#50,000)
- Important: Before you record, you should not have more than #1,000,000 (about #900.000 is a nice figure to have) otherwise someone will hold your master tape to ransom for that price, leaving you short of cash. Give gifts to reduce cash if necessary.

Naming Album Tracks (and Album

- Keep most of the single tracks named by Clive.
- Change about 3 out of 10 to your own
- These names should have similar names to common top 10 records, e.g. "I want your shirt", "Drinking with the gas man", "Hula Hula Bop-A", etc.
- Call your album (when you release it) something to do with the band name, e.g. The Crazy Band - A billion Crazy Band hits.

Releasing Singles (and Album)

- Release first single straight away after recording with Busby Berserkely, in the Bahamas. Choose the most "sensible" video
- If a single takes more than 4 weeks to chart, release another
- You won't chart if you release more than one single at a time. (When you release a second the first automatically drops out of the
- Release a second single when the first falls to no 7 or lower. Hopefully you should be able to afford a video with Cecil Bidet-Mills in the Bahamas. Always choose a different video type
- All subsequent singles should have videos by Steven Cheeseburger in the Bahamas (if affordable)
- Release your album the week your first single charts. The whole game is based on album

Never re-release a single.

Charity Gigs & Telephone calls (argh!)

- When the Taiwanese outfit report is received, either send the boys around or sue them. You'll still have to pay, even if you win.
- Later in the game, you will get sued or back taxed for £1,000,000, there is nothing you can do about it.
- Charity gigs: Important.
- Some charity gigs are real charities, and some are phoney. Your choice to perform the gig is crucial. If you refuse a real charity or accept a phoney one your sales will go down, you'll get bad publicity, single and album sales will fall,
- Determining real charities can be done. It depends on your group's LAST NAME, i.e.

Gig no	1	2	3	4	5	6	7
Armageddon	Y	N	N	N	N	Y	
Donkeys	Y	N	Y	Y	Y	Y	Y
Band	Y	Y	Y	Y	Y		
Orchestra	Y	Y	Y	N	N	N	
Crowd	Y	Y	N	Y	N	Y	

- Y = Yes to a charity gig, N = No.
- Note: There are other last names for your group (Organisation, Group etc.) the charity gig sequence for these can be determined by experience.

Gifts

- Give gifts every 2 tours.
- Increase these in value through the year.

Practice

Don't bother, it just wastes a day!

Publicity

- Don't do publicity unless:
- a) You just got a charity gig wrong.
- b) A star has just quit or died. c) Your singles aren't charting.
- Publicity can be fatal avoided at all times.

 If you do go in for () some then repeat until "good" publicity is obtained. Good publicity begins "Rock star ... " and a picture of the star appears instead of the page 3 cartoon.

Gigging

- Apart from royalties (very little money), gigging is the only way to get cash.
- Generally, once your first single has been released, all gigs should be in stadiums at #10 for 7 nights.
- N.B. If you begin a 7-night gig on Saturday two charts will pass before you are brought back to the options screen.
- Gigging at #15 hardly ever earns as much as gigging at #10
- If you get a charity gig wrong or a star has died/quit then attendance will be low. Gig in concert halls at #15 for a week before moving back to stadiums.

The Charts (singles and albums)

- The object is to get four gold discs.
- Gold discs can only be achieved by good album sales.
- Good album sales follow on from good sinale sales.
- You can't directly control where and when singles chart, but a good one will first chart 2 weeks after release.
- The album will normally go up one place in the charts if:
- a) The single goes up (or new entry) at no.8 or higher. b) The single stays at no.6 or higher.
- c) The single is no.5 or above. • The album will go up more places if the single is at no.1
- If the album is out of the charts it takes ages to get it back in.
- Release the next single when the first falls to no.7 or lower.



ZTR





Mastering machine code

his month AA starts a new series on assembly language (machine code) programming for beginners. Over the next few months you will learn how to write well structured and mega fantastic assembly code. Who knows? You may well be writing games for Ocean before long! ANDY PRICE is your guide...

xited? You should be! You are about to assemble the listing to address 30000 in memventure into the world in which all commercial programmers live. They all eat, drink, sleep and talk assembly language and look like something from Planet of the Apes (speak for yourself - ed).

And just to show you how painless machine code can be, we are going to start off by writing a simple assembly program to print a character onto the screen. Nothing amazing about that, but after messing around with it and having some fun you'll look forward to part two of this series for more startling stuff.

So, read your assembler instructions and let's get down and boogie...

Type in the program into your assembler in the appropriate way (the instructions will tell you how) and assemble it. Now execute the program by CALL 30000 from BASIC. Wow! It prints the letter 'A' on the screen

ORG 30000 is an assembler directive (tells the assembler to do something) which tells it to

LD 4.65 loads the accumulator with the value 65 in decimal which, in ASCII, is the letter 'A'. Don't worry too much about the accumulator yet, all will be explained later.

CALL &BB5A is a firmware call to print a character onto the screen (&BB5A being the address in memory where the routine is stored).

RET, the same as END in BASIC, ends the pro-

A BASIC alternative

If you have not got an assembler just try to understand the assembler listing and type in the following BASIC listing instead. This listing takes the codes and pokes them into memory, creating a machine code program. By the way, in case you're thinking you don't need an assembler if you can load machine code from

BASIC, don't you believe it. Writing code that way is a nightmare! It's so difficult it's practically impossible for a program of any complexity

Fundamentals

You may recall that I was waffling on about the accumulator, well now it's time for explana-

The Z80 contains various registers (they have the same function as variables in BASIC) where data can be stored. However, in machine code registers are in quite short supply compared with BASIC. Most machine code instructions use these registers and the one which gets the most bashing is the accumulator. The accumulator can hold a number in the range of 0 to 255. In our machine code listing LD A.65 'LoaDs' the number 65 into the accumula-

The other registers are B, C, D, E, H and L. These registers, like the accumulator, are only capable of storing a number from 0 to 255, known as an 8-bit number. Many of you may be thinking, 'what about numbers higher than 255?' Well, we can pair the above registers together to get these registers: BC, DE and HL. These can deal with numbers from 0 to 65535, known as 16-bit numbers. There are a few more specialist registers which I will leave for the time being, so that you can get a basic understanding of all the principles I am outlining here.

If all this seems a bit bewildering, don't worry, all will become a lot clearer when we put these registers into action with some serious code, code which will make you shiver, code which will blow your chips wide open, code which will...

Register loading

If you refer back to our machine code listing, you will see the instruction LD A,65 which loads the accumulator with 65. This type of loading is called immediate addressing. This type of addressing not only applies to the A register (accumulator) but also to all of the other single registers. Thus, the LD instruction generally looks like this:

THE MACHINE

If you've got any problems with machine code gen-

No question too daft, no tip too useless - we want to

Also, I have had letters passed one from people

who wish to know more about pokes and how to find

them. Being quite an expert in that area (ahem!) I am

The address to write to in both case is opposite:

willing take the art of poking a little further.

erally or with the exercises in this series, write in!

LD register.operand

hear from you.

WHAT IS MACHINE CODE?

The Z80 microprocessor is a chip (no, not made of potato) made of plastic, silicon and who knows what else which is the brains of your Amstrad. The machine code numbers are instructions (like PRINT in BASIC) which the machine understands.

This is quite different to the language we're all familiar with - BASIC. BASIC is an interpreted language. What that means is that it can take instructions ordinary human can understand and type in, and then converts them into a form the electronic chippery inside your Amstrad can follow.

The trouble is that while BASIC is easy (well, easier) to follow, it's also rather slow and inefficient. This means that although you can program games and serious programs in BASIC, they'll take up more disk space, look worse and run slower than if you program the hardware directly.

That's where machine code comes in. Compared to BASIC it's just a jumble of numbers and weird instructions, but with the help of this series it will all start to make sense..

Machine code is not actually that difficult to grasp, and it offers lots of advantages:

• Well written code is generally much faster than

a BASIC routine designed to do the same thing.

- Various nefarious operations can be carried out which are impossible in other languages, such as split mode displays and speech synthesis.
- Code generally occupies less memory than a

HOWEVER, machine code is difficult to understand and debug (don't worry about that) and many instructions are needed to carry out a simple routine, like printing a string of characters onto the

Nevertheless, machine code is far better than any other language - but how do we program in machine code? The simple answer is that we don't. Instead, we program in something called assembly language.

Assembly language is used (only nutters use machine code directly) to make programming in machine code that little bit easier. Assembly uses mnemonics, which are simple memory aids, to help us remember the various instructions.

CODE CLINIC...

CODE & CHIPS AMSTRAD ACTION BEAUFORD COURT 30 MONMOUTH STREET BATH **AVON BA1 2BW**

Where 'register' is any 8-bit register - A, B, C, D, E, H or L. 'Operand' refers to either an 8-bit register or an 8-bit number in the range of 0-

Ready for another crack at the code? Listing 3 illustrates register loading.

Once again, type the program into your assembler, assemble it and type CALL 30000. This program prints the letter B on the screen (startling stuff!). We are not into the mega code yet but we are indeed getting there...

Listing 3 is a perfect example of register loading. Firstly, register C is loaded with 65. Then register H is loaded with the value held in C, which is 65. The A register is then loaded with the value held in H. This may all seem pretty pointless but it will all come in useful when we come to write more complex pro-

The instruction INC r is a very simple instruction. It increases the value held in an 8bit register by one, where r is the register. In the example program in Listing 3 it increases the value of the A register by one. Thus A now holds the value 66 which, in ASCII, is the letter B. CALL &BB5A prints the contents of A as a chracter on the screen.

Now it's your turn

Well, we've covered a lot of heavy going this month. Now it's time for a change. You lot are going to write a short assembly program, using the information I have given you.

In your computer manual there should be a list of the standard ASCII character set with the decimal, octal and hexadecimal notations. together with the ASCII code where appropriate. In particular, you will find the ASCII codes from A to z (65 to 122) useful for this exercise.

Get your crayons ready and also get a bit of paper, it will save you using the table (and will save you a lot of trouble). I want you to write a program to print your surname on the screen. using the same style as I used in Listing 1. Nothing too taxing about that! However, anybody who encounters problems will find a very useful solution in the next instalment. So, hack fans, get scribbling...

WHAT DO YOU NEED?

To get the most from this series, there are a few things you need:

- A decent assembler look no further than the AA71 Action Pack! This contained a full version of Devpac from Hisoft, and I shall be referring to this program in future examples - it's the one I can be sure everyone's got! Alternatively, I would recommend MAXAM from Arnor, which costs about £25 on ROM, £16 on cassette and £19 on disk. You can get it from any software
- 2 A list of Z80 instructions for reference. This can be found in a book called Programming the Z80

by Rodney Zaks, or Mastering Machine Code on Your Amstrad by Interface. The second is the cheaper and the one I have. I recommend going to a library and have a look around there for it.

3 I'm risking my life a bit now, but if you can get your grubby paws on one, get a Firmware manual. This holds explanations of all of the built-in routines like character printing and screen control etc, and is unlikely to be available brand new. Look in the Small Ads section and try to get one second hand. Be warned, though they're like gold dust. Failing that, I'll explain some of the more useful firmware routines as I

LISTING 1:

ORG 30000

LD A,65 CALL &BB5A RET

put the number 65 into accumulator print the ascii character on screen exit from routine

LISTING 2:

10 FOR a=30000 TO 30005 20 READ b\$:b=VAL(_&| +b\$) 30 POKE a.b:NEXT:CALL 30000 40 DATA 3e,41,cd,5a,bb,c9

LISTING 3:

ORG 30000

LD C.65 LD H,C LD A.H INC A CALL &BB5A

load C with 65 load H with value held in C load A with value in H increase value of A by one print ascii character in A on screen exit routine

Jype-Ims

A ll the programs on the following pages are ones you can type in yourselves. If you reckon you're a bit of a whizz at programming, why don't you send us your own? Just keep them short, that's all. We're unlikely to use anything longer than 6K,

and we pay the same for all Type-ins, so you won't get any extra cash!

Send your programs to: Type-ins, Amstrad Action, Future Publishing, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

WORDTYPE

G.Bownes from County Down in Northern Ireland has sent in this rather smart little word processor. It's really more of a text processor than a fully-featured program, though, and its only real application is

writing letters. The instructions are included in the program and any document you produce can be as long as you like. There are limitations, though. For example, you can't flow text for more than three lines.

The program is incredibly enough, contained



Wordtype isn't incredibly sophisticated, but

in only 2K of code and so is very short. A lovely little prog and well worth the effort of typing in.

{BxAs} 1.'WordType.by.G.Bownes

{OpAp} 2.DIM.file\$(3000)

{OmBt} 5-MODE 2:CLG:INK-0,6:BORDER-6:INK-1,26:PAPER-0:P EN - 1

{JrBo} 10.DRAM.0,399:DRAM.639,399:DRAM.639,0:DRAM.0,0 {CuRp} 20.MOUE.0.50:DRAN.639.50:MOUE.0.350:DRAN.639.350

{H1Bv} 30.LOCATE.20,2:PRINT"WordType.by.G.Bownes..";CHR \$(164);"1991"

(MuBs) 40 LOCATE · 18, 10: PRINT" 1. Set · length · and · names · of ·

{GkB.i} 50.LOCATE.18.13:PRINT"2.Create.file"

(FpBn) 60.LOCATE.18,16:PRINT"3.Print.the.files"

{JnBw} 70 · MOVE · 100, 100: DRAN · 100, 280: DRAN · 400, 280: DRAN · 4 00.100:DRAW-100.100

{KsBp} 80.LOCATE.20,24:PRINT"Please.type.in.your.choice

{FuAx} 90 · i \$= INKEY\$: IF · i \$= "" · THEN · 90

{BiBt} 100 · i = VAL(i\$): IF · i = 0 · OR · i > 3 · OR · i * = " . " · THEN · 90 · EL

(KIBn) 110 · LOCATE · 48 · 24 : PRINT · i : FOR · P=1 · TO · 1000 : NEXT

{JkBm} 120.WINDOW.2,79,5,19:CLS:ON.i.GOSUB.130,160,200 {Lkay} 130.LINE.INPUT"Enter.filename.:.":f\$

{BnBx} 140.LOCATE.1,5:INPUT Approx..number.of.lines.:." :1:1=INT(1/3)

{GwDn} 150·s=1*3*80:LOCATE·1,10:PRINT"Maximum·character ·space·:·";s;"·characters.":FOR·P=1·TO·1000:NEXT:GO T0 . 5

{IrD.j} 160.CLS:WINDOW.2,70,5,10:LOCATE.10,2:PRINT"Remem her to press ENTER after every 3 lines of text" {AnCn} 170 LOCATE 10,4:PRINT Maximum character space:

";s;"...Filename.:.";f\$ {NnBu} 180 WINDOW 2, 70, 10, 19:CLS:PRINT CHR\$(1):FOR text

(HiBo) 190.LINE.INPUT.file\$(text):PRINT.CHR\$(1):NEXT.te

xt {OwCj} 195.CLS:LOCATE . 20, 10:PRINT"FILE . FULL" :FOR . P=1 . TO

- 1000: NEXT: GOTO - 5 {EqCv} 200.LOCATE.8,10:PRINT"Turn.on.printer,turn.on.li ne and put in paper Press and key to print"

{CtCi} 210.CALL.&BB18:LOCATE.20,13:PRINT"Printing.file.

{IqCs} 220.WINDOW-2,70,5,18:CLS:WIDTH-69:FOR-p=1-T0-tex t:PRINT#8.file\$(p):PRINT.file\$(p) {HmBi} 230 · NEXT: FOR · P=1 · TO · 1000 : NEXT: GO TO · 5

Tapetest, from Martin Bela, is a very nice utility for owners of

tape machines. It uses a facility on the Amstrad which lets you vary the baud rate of the tape unit. This means that you can save your own programs at different speeds, often faster than normal.

The program itself contains all the instructions you need and teaches you what to do as you go along. The program is by the way,

data will be saved to tape ded back again. The loaded n compared with the original g differences reported n select a different speed

ou will be asked for two variables:a) HALF-ZERO LENGTH

.Press (SPACE) to continue... • Tapetest lets you vary the baud rate of your tape unit to find the highest speed at which vou can transfer data.

ARE TYPE-INS **PUBLIC DOMAIN?**

All Type-Ins submitted to Amstrad Action automatically go into the public domain. If you don't want this to happen, make it lear when you send your program ir

a perfect example of how to use REM statements and clean programming, and would be a useful example for someone who's just beginning to use BASIC.

..Press (SPACE) to continue.

Taptest even has its own built-in documentation! (Though by the time you've typed the prog in you'll have read it anyway.)

{JgAv} 10 · REM · TAPETEST · bu · Martin · Bela

{HuEn} 20 · | TAPE:prm\$="To · stop · a · faulty · save · press · (ESC) Then ·press · (CONTROL) · and · (ENTER) · for · menu" :pr mpt\$="...Press (SPACE) . to . continue..."

(LpC.i) 30 DATA 15.240.85,170.51,204.8,247.0.0.0.42.0.12 8,58,2,128,205,104,188,201

{Part} 40.MEMORY.&6FFF:wn=1:ck=0:PAPER.0:PEN.1:MODE.1:I NK . 0 . 9 : TNK . 1 . 26 : RORDER . 12 : KEY . 140 . "GOTO . 200" + CHR\$(1 3):WINDOW#1,5,35,25,25:PRINT.TAB(12)"TAPE.SPEED.TES

{BlFs} 50 PRINT:PRINT"This program will allow you to de terminethe . . fastest . reliable . . . SAVE . and . LOADspee ds.of.wour.computer/cassette.set-

up.":PRINT"A.block.of..data..will.be.saved.to.tape

{HuHo} 60 PRINT"and then loaded back again. ... The loade dfile is then compared with the original data and a ny.differences.reported.":PRINT"You.may.then..selec t. a. different speedand tru again. ": PRINT: PRINT" Yo u.will.be.asked.for.two.variables:-":PRINT

{HtGk} 70 · PRINT" · · a) · · HALF-

ZERO · LENGTH" : PRINT : PRINT" · · · This · · effectively · · sets · the · · save · · · · · speed · · · It · should · be · between · · 130 ·····microseconds and 480 microseconds, ·····altho

ugh..this..program.will.allow.....you..to..experim

(IwH.i) 80 PRINT" ... wider range of values. ": GOSHR : 390: PR INT" .. h) .. PRECOMPENSATION" : PRINT : PRINT " ... Tabedeck···circuitry···tends···to·····alter·the··signa ls..sent..to.it.by.....the.computer..so...precompe nsation....is added to counter this effect."

ent .. with .. a .. much'

(DvBx) 90 PRINT"...It's...value...should..he..hetween..0.and.255.microseconds.":PRINT

{IwH.j} 100 PRINT"Example 1)":PRINT"The . NORMAL . save . . . speed ·· in ·· BASIC ·· is equivalent · to · the · following · set tings:-":PRINT"HOLE-

ZERO·LENGTH·=·333·microseconds":PRINT"PRECOMPENSATI ON..=.25..microseconds":PRINT"Giving.a.save.speed.o f.about.1000.baud."

{GtGv} 110 PRINT:PRINT"Example 2)":PRINT"The FAST save speed.is.equivalent.to:-":PRINT"HOLF-ZERO · LENGTH · = · 167 · microseconds" : PRINT" PRECOMPENSATI

ON. : - 50 · microseconds": PRINT" Save · speed · is · approxi matelu:2000:haud.":GOSIR:390

{PiHq} 120 PRINT"If you find some settings that you wou Idlike to use in wour own RASTC programs then wou r..program..should..contain.thefollowing.five.lines

":PRINT:PRINT" - 10 - MEMORY - & 7FFF" : PRINT" - 20 - FOR - m = & 80 00 . TO . & 800C" : PRINT" . 30 . READ . d : POKE . m . d : NEXT . m

{Frcv} 130 · PRINT"CALL · & 8003" : PRINT" · 40 · DATA · x, y, z, 42,0,

128,58":PRINT".50.DATA.2,128,205,104,188,201" {HpGj} 140 PRINT:PRINT:PRINT"The .. x . y . and . z . . . in . . line .

·40 · · should · bereplaced · with · · three · numbers . · · · You · ·

out-what-these-are-by-selecting-the-SHOW-X-Y-Z---op tion . from . within . this program . . . Please . note . . that .. this option":

{ImCu} 150 PRINT"and the information shown at the top. ofthe · · screen · · relate · · only · · to · · the · · mostrecent · SA

{GrEx} 160.GOSUB.390:MODE.2:WINDOW.1,80,5,23:WINDOW#1,1 ,27,2,2:WINDOW#2,57,80,2,2:WINDOW#3,32,47,2,2:WINDO W#4.1.80.25.25:BORDER-1:INK-1.26:INK-0.4:PRINT"Gene rating data ... "

{JnCr} 170 m=27000:FOR n=1 TO 8:READ d:ck=ck+d:FOR p=1 TO - 256 : POKE - m, d: m=m+1 : NEXT - p, n

{LxFr} 180 .CALL . &BC65: hzx=333:pcx=25: hx=1:rx=77: FOR .m=& 7800 · TO · & 7FFF : POKE · m . 0 : NEXT : FOR · m = & 8000 · TO · & 800C : RE AD.d:ck=ck+d:POKE.m.d:NEXT:CLS#5:IF.ck<>2076.THEN.P RINT"ERROR. IN . DOTO" . FND

{Guar} 190.GOSUB.370:ef=0:wn=0

{HaEu} 200 · CLS#4 : CLS : GOSUB · 380 : PRINT" Select · one · of · the e options: ":PRINT:PRINT"1...Save":PRINT:PRINT"2...L oad":PRINT:PRINT"3...Compare":PRINT:PRINT"4...Show-X . 4 . Z"

{MiFk} 210 · IF · INKEY(64)=0 · THEN · CLS; GOTO · 230 : ELSE · IF · INK EY(65)=0.THEN.CLS:GOTO.290:ELSE.IF.INKEY(57)=0.THEN ·310:ELSE · IF · INKEY(56) = 0 · THEN · 420:ELSE · 210

{OrAm} 220 REM save

(Ksau) 230 GOSUB 380 PRINT PRINT SAUE"

{MkGn} 240 PRINT: INPUT"Enter half-

zero·length·)·".hzx:TF·hzx>&4FF·THEN·PRINT:PRINT"TO O.LONG.....TRY.AGAIN....":GOTO.240;ELSE.IF.hzx<1.TH EN.PRINT:PRINT"TOO.SHORT.....TRY.AGAIN....";GOTO.24 0:ELSE-GOSUB-370

(PrHv) 250 PRINT: INPUT Enter amount of precompensation >.", pex: IF · pcx>255 · THEN · PRINT : PRINT "TOO · MUCH · ... · TR Y-AGAIN ": GOTO - 250 : ELSE - IF - pcx (0 - THEN - PRINT : PRIN T"ILLEGAL ENTRY RE-ENTER . HALF-

ZERO · LENGTH ": GOTO · 240 : ELSE · GOSUB · 370 : hx=INT(hzx /256):r%=hz%-h

{LkF1} 260 . POKE . &8000, rx: POKE . &8001, hx: POKE . &8002, pcx: C ALL . & 8003: PRINT: PRINT" Position . tape . ready . to . save . " ;:CALL . &BCGE:PRINT" . Then . press . (SPACE) ":GOSUB . 400:C ALL: SRC71

{GIDk} 270 · PRINT#4, prm\$; : ef=0: SAVE · STR\$(hzx)+" ·-"+STR\$(pc%).b.&7000.&800:PRINT:PRINT"Done...."::GOS

IIB : 390 : COTO : 200 {IkAn} 280 · REM · load

{GrHv} 290 GOSUB 380 PRINT PRINT"LOAD" PRINT PRINT"Posi tion·tape·ready·to·load·file.";:CALL-&BC6E:PRINT"·T hen press (SPACE)":GOSUB 400:CALL 8BC71:PRINT#4.prm \$::LOCATE#4,18,1:PRINT#4,"load";:ef=1:LOAD."",&7800 :PRINT:PRINT"Done..."::GOSUB:390:GOTO:200

{IsAp} 300 REM compare

(RrHk) 310.COSUR.380:CLS:TF.ef=2.THEN.COTO.330:ELSE.TF. ef=0.THEN.PRINT"File.not.loaded.yet!!!":PRINT:GOTO. 350: ELSE: eX=0: n=87800: PRINT: PRINT"COMPARE": PRINT: PR INT"Please·wait·.....":FOR·m=&7000·TO·&77FF:IF·NOT· PEEK(m)=PEEK(n).THEN.ex=ex+1

(PmCi) 320 POKE n.0:n=n+1:NEXT:ef=2:PRINT:PRINT"Compari son complete":

(D.iD.i) 330 TF ex=0 THEN PRINT" Noverrors": ELSE TF ex=1 THEN . PRINT" . 1 . error" : : ELSE . PRINT . ex: " . errors" :

(Indr) 340 PRINT" found ... "

{Klaw} 350 PRINT: GOSUB - 390: GOTO - 200

{GxAv} 360 · REM · display · variables

{KmFl} 370 ·CLS#1:PRINT#1,"HALF ·ZERO ·LENGTH ·= "; hzx; CHR\$(183);"s";;CLS#2;PRINT#2,"PRECOMPENSATION:=";pc%;CHR \$(183); "s"; ; CLS#3: PRINT#3, "BAUD · RATE · ="; USING · "#### #";333333/hz%;:RETURN

{DmAu} 380.WHILE.INKEY\$()"":WEND:RETURN

{LrAr} 390 · PRINT#wn . prapt\$:

{AuB.i} 400 · WHILE · INKEY(47)()0: WEND: CLS: RETURN

{ApAo} 410 REM · show · x · y · z

{PqCt} 420 · CLS:PRINT" · x · = "r%:PRINT: PRINT" · u · = "h%:PRINT: PRINT" . z .= "pc%: PRINT; GOSUB . 390; GOTO . 200

PICSTORE

Nicholas Pve, way up in Bonny Scotland, has sent along this rather smart little graphics utility. The program sets the Amstrad up

with a RSXs allowing it to perform some rather neat tricks. Unfortunately, it will only run on a 6128 because of the way it utilises memory.

The utility has three RSXs, which use the following commands:

I STORESCREEN, X I FETCHSCREEN, X

I MINISCREEN, X

These commands allow up to four screens to be saved into the 6128's extra memory. Storecreen saves the screen to memory, Fetchscreen retrieves it and Miniscreen displays all four screens at once.

For example, the line

LOAD screen.scr ,&COOO: ISTORESCREEN, 2

will load a screen and store it in bank 2 To retrieve it, simply enter

| FETCHSCREEN. 2

The program is fast, clever and, for what it does. surprisingly short. Well done Nicholas.

(MgAv) 10. PICTURE STORE DELUX . v2.0

{Ctaq} 20 . 'NICHOLAS . PYE . 1991 .

(FuBm) 30. ** WARNING ** Please SAVE before running

{Iwan} 40.MEMORY.#7FFF

{LuAk} 50·s=0

{LsAg} 60 · FOR · a = 88000 · TO · 880E7

{PkAu} 70 . READ . b\$: b=VAL("&"+b\$)

{GpAm} 80 . POKE .a, b

{H.iAm} 90.s=s+h {IxAk} 100 · NEXT · a

(FnCu) 110.CLS: INK: 1.9.18: IF:s()&6889: THEN: PRINT"From: in Data": WHILE INKEYS="": WEND: INK . 2. 24: PEN . 2

{Tkap} 120.CALL.&8000

{NjCu} 130 ·CLS:LOCATE · 1,1:INK · 1,18,9:PRINT"RSXs · Install ed":WHILE . INKEY\$="":WEND:INK . 2, 24:PEN . 2

(Foa.i) 140 NEW {GpBt} 150.DATA.01,0E,80,21,0A,80,CD,D1,BC,C9,8C,9F,0E, 80.19.80

{CpBs} 160 DATA C3, 3A, 80, C3, 5C, 80, C3, 7E, 80, 53, 54, 4F, 52, 45.53.43

(JsBt) 170.DATA.52,45,45,CE,46,45,54,43,48,53,43,52,45, 45.CE.4D

{JoBs} 180 DATA 49,4E,49,53,43,52,45,45,CE,00,FE,01,CO DD. 7E.00

(GoBs) 190 DATA FE, 05, D0, FE, 00, C8, C6, 03, CD, 5B, BD, 21, 00, C0,11,00 (FnBq) 200 DATA 40,01,00,40,ED,B0,3E,00,CD,5B,BD,C9,FE,

01,C0,DD {IwBt} 210.DATA.7E,00,FE,05,D0,FE,00,C8,C6,03,CD,5B,BD,

11,00,C0 {CnBq} 220 DATA 21,00,40,01,00,40,ED,B0,3E,00,CD,5B,BD, C9.FE.01

{CtBq} 230.DATA.CO,DD,7E,00,FE,05,D0,FE,00,28,48,C6,03, FS,CD,SB

{CpBq} 240 DATA BD, F1, 21, 00, C0, FE, 04, CA, AD, 80, 21, 28, C0, FE.05.CA {PkBt} 250 DATA AD 80 21 CO E3 FE 06 CA AD 80 21 E8 E3

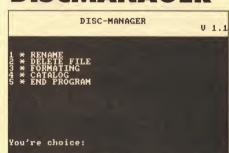
06.64.11 (PyBu) 260 DATA 00, 40, E5, D5, 0E, 28, 1A, 77, 23, 13, 13, 0D, 79,

20.F7.E1 {CrBs} 270.DATA.CD, 26, BC, CD, 26, BC, EB, E1, CD, 26, BC, 10, E5, 3E,00,CD

{IsBu} 280 DATA SB, BD, C9, 3E, 01, CD, 8B, 80, 3E, 02, CD, 8B, 80,

3E,03,CD {FqAx} 290.DATA.8B,80,3E,04,CD,8B,80,C9

DISCMANAGER



 The standard Amsdos BASIC interface isn't. where Discmanager comes in...

Discmanager, from Jan Hohansen, is one of those programs that no-

one should be without. It has the all usual disk management features

and makes filing and sorting your disk collection a good deal easier

The program is fairly self-explanatory and is very simple to use. Once loaded, you are presented with a menu containing the following commands

RENAME (allows you to retitle programs





quickly and easily)

DELETE FILE (a safer way to erase unwanted files and very fast too)

FORMATTING (formats blank or written disks, entirely erasing the latter)

CATALOG (standard disk cataloguing system)

QUIT returns you to BASIC but still allows access to the program.

{NtAo} 10.'DISCMANAGER (P.iBr) 20. 'August . 1990 ..

· Thanks · to · NIC · and · BOBBY · THE · BRAIN

{OiAo} 30.'Jan.Jonasen

{NsAl} 40. Denmark

(ImEi) 50. ********************************* ************ {BvB.j} 60.'***.....Disc.-

·Manager·····*** {JmAu} 70:'*** ****

(BpE.j) 80 · '********************** **********

{EkRk} 90.0PENOUT."x": MEMORY.HIMEM-1:CLOSEOUT

{NoCl} 100.DATA.&3e,&00,&32,&2f,&80,&3a,&2f,&80,&57,&3a ,830,880,85f,83a,831,880

{AkC,j} 110.DATA.&4f,&21,&35,&80,&df,&32,&80,&3a,&2f,&80 354.554.054.808.754.934.83f

{AvCl} 120.DATA.880,821,835,880,806,809,877,823,823,823 .823.810.8f9.818.8d6.827

{Byau} 130.DaTA.800.841.852.8c6.807

{C.ior} 140.FOR.i=88000.TO.88034

(NmAm) 150 · READ · d (EoAm) 160 . POKE . i, d

{OuAk} 170 · NEXT

{LtAo} 180 · MEMORY · & 7FFF

(Omar) 190 .CLEAR: DEFINI .B-Z

{EjCk} 200 MODE 1: INK 0,11: INK 1,16,6: INK 2,0: INK 3,24: PEN-3:PAPER-2:CLS

(HIAS) 210.ON.BREAK.GOSUB.1240..

{Mm Am} 220 - BORDER - 0

{EmBi} 230 · CLS : ORIGIN · 0 , 0 , 0 , 640 , 340 , 400 : CLG · 3

{LsCs} 240 PAPER 3:PEN 2: LOCATE 14,2:PRINT"DISC-

MANACER":LOCATE:36.3:PRINT"U-1.1":PAPER:2:PEN:3

(NyAg) 260 PRINT"1 . * RENAME"

{ApAv} 270.PRINT"2.*.DELETE.FILE"

{Awat} 280 PRINT"3 ** FORMATING" {KxAq} 290 ·PRINT"4 ·* · CATALOG"

{Juau} 300 .PRINT"5 .* . END .PROGRAM

{AkBq} 310 LOCATE 1,20:PEN 1:PRINT You're choice:

{NiAx} 320.a\$=INKEY\$:IF.a\$="".THEN.320

(DsRm) 330-we=UAL(a\$):TF-we(1-OR-we)5-THEN-320

{KmB1} 340 · PEN · 3:0N · we · GOTO · 1120 , 500 , 350 , 1060 , 1240

_____ {JiAr} 360.'....Formating

(LxCr) 370.'-----

{CoCt} 380 . CLS:PRINT"1 . * . UENDOR . format":PRINT:PRINT"or :PRINT:PRINT"2.*.DATA.ONLY.format" {MoBm} 390 a\$=INKEY\$:IF a\${"1" OR a\$>"2" THEN 390

{ArCk} 400 · IF · a \$="1" · THEN · f \$= "VENDOR" : y=841 · ELSE · f \$= "DA TA · ONLY" : y=&C1

(MrA1) 410 x=88035

{KpAn} 420 . FOR . i=1 . TO . 9

{H1Bm} 430 POKE .x.,0:POKE .x+1,0:POKE .x+2,y:POKE .x+3,2

{PiAm} 440 x=x+4

{MpB1} 450 y=y+2:IF (y AND &F)=&B THEN y=y-9

(FxAk) 460 NEXT

{KvBq} 470.PRINT"Pleace.put.in.disc":PRINT"And.press.*. SPACE . *"

{JsAx} 480 · IF · INKEY\$="" · THEN · 480 {CrAu} 490 . CALL . & 8000 : GOTO . 190

_____ (H1At) 510.'....Delete-fil

(MyAu) 530.DTM.a\$(65).era(64):CLS

(E.iB1) 540 LOCATE 4.11:PRINT"Directory reading ... "

{ExAt} 550 · lin*=STRING\$(40,154)

(E.jAp) 560 · FOR · i = 0 · TO · 63 {DjAt} 570 as(i)=STRING\$(11,32)

{GkAk} 580 ·NEXT

(MxBq) 590 a=PEEK(&BBSA):POKE-&BBSA,&C9:CAT:POKE-&BBSA,

{OnBt} 600 anz=PEEK(&A912):a=PEEK(&A79C)*256+PEEK(&A79B)+1

(RIAI) 610 -CLS

{CiAq} 620 · FOR · i = 0 · TO · anz

{GvBk} 630 · POKE · @a\$(i)+1,a-(INT(a/256)*256)

(FiB.j) 640 . POKE . @a\$(i)+2, INT(a/256); a=a+14

{IoAk} 650 NEXT

{DuAp} 660 · FOR · i=0 · TO · anz

{PrBs} 670 · IF · ASC(LEFT\$(a\$(i),1))=0 · THEN · a=i:i=anz:GOTO

{IoBj} 680 a\$(i)=LEFT\$(a\$(i),8)+"."+RIGHT\$(a\$(i),3) {AoAn} 690 PRINT as(i).

{NsAn} 700 ·NEXT:anz=a

{CnAv} 710 · LOCATE · 1.22 : PRINT · lin\$

{GtAp} 720 · PRINT · CHR\$(10)

{FuCk} 730 txts="you.want.to.delete.on.this.disc?.(y/n) ":GOSIIR:1949

{FtBk} 740 - GOSUB - 1050 : IF - LOWER\$ (a\$) = "y" - THEN - 790

(RERy) 750 tyte="ENTER:=:New.disc.:X:=:End":COSHB:1040 {NkBo} 760 GOSUB 1050: IF a = CHR\$(13) THEN ERASE A\$, ERA

{OpBm} 770 · IF · LOWER\$(a\$)="x" · THEN · 190 · ELSE · 760

{MxAu} 780 PRINT CHR\$(10):PRINT CHR\$(17) {JjBx} 790 ·txt\$="Press · 'COPY' · to ·mark · file · to ·delete" : G

{Fuan} 800.x=0:x=1:u=1:GOTO.900

{BkBn} 810 x=temp:GOSUB 1050:IF a\$=CHR\$(13) THEN 950

{MgBu} 820 · IF · ASC(a\$)=&F0 · THEN · x=x-

3:TF.xCO.THEN.810.ELSE.900

{GoCi} 830 · IF · ASC(a\$)=&F1 · THEN · x=x+3 · ; IF · x > anz-1 - THEN - 810 - ELSE - 900

{AmBx} 840 · IF · ASC(a\$)=&F2 · THEN · x=x-

1:TF.xCO.THEN.810.ELSE.900 {EoC.j} 850 · IF · ASC(a\$)=&F3 · THEN · x=x+1 : IF · x > anz-

1.THEN - 810 - ELSE - 900 {FwBi} 860 · IF · ASC(a\$) (> &E0 · THEN · 810

{PrAs} 870 · era(x) = era(x) · XOR · 1 ·

{HoAw} 880 · LOCATE · xc, yc: PAPER · era(x)

{Orav} 890 PRINT a\$(x); PAPER 2:GOTO 810

{KnBo} 900 · yc0 · = · x \ 3+1 : xc0 = (x - ((yc0 - 1) * 3)) * 13+1

{LqBm} 910.LOCATE.xc,yc:PAPER(era(temp)=0)*-2+era(temp)

(MpAt) 920 PRINT as(temp); PAPER 2

(BmBr) 930 LOCATE xc0, yc0:PAPER era(x):PRINT a\$(x);:PAP

{EpBk} 940 xc=xc0;yc=yc0:temp=x:GOTO-810

{EvDi} 950.LOCATE.xc,yc:PAPER.2+(era(x)()0):PRINT.a\$(x) ::PAPER · 2:txt\$="Are · all · files · markt · (y/n)":GOSUB · 10

(MxB1) 960 -GOSUB - 1050: - IF - LOWER\$ (a\$)() "y" - THEN - 790

{CtBx} 970 txts="Do you want to delete them? (y/n)":GOS {AlBm} 980 .GOSUB .1050: .IF .LOWER\$(a\$)()"y" .THEN .790

(PoBw) 990 txts="THE FILES ARE NOW GETING DELETE!!":GOS

{EvAp} 1000 · FOR · i = 0 · TO · anz

{KpAw} 1010 · IF · era(i) · THEN · | ERA, @a\$(i)

{EiAl} 1020 NEXT

{Num} 1030 - GOTO - 1090

{ElBm} 1040 · LOCATE · 4, 24 : PRINT · CHR\$ (20) ; txt\$: RETURN

(EkBo) 1050.as=INKEYS:IF.as="".THEN.1050.ELSE.RETURN

-----{Alan} 1090 · CLS : CAT

(NuBi) 1100 PRINT: PRINT" PRESS .* SPACE .*

{GnBn} 1110 · IF · INKEY\$="" · THEN · 1110 · ELSE · 190

{Cnar} 1130.'....Rename _____

{AqA1} 1150 - CLS {PsBq} 1160 · INPUT"Old · filename: · ", falt\$: IF · falt\$="" · THE N - 190

{KnBm} 1170 · INPUT"New · filename: · ", nyf\$: IF · nyf\$="" · THEN ·

{PiAs} 1180 · PRINT"Put · in · disc"

{MmBv} 1190 PRINT"On whits the file "CHR\$(24); falt\$; CHR \$(24)"·is"

{MkAx} 1200 PRINT: PRINT" Then any key" (NoAx) 1210 · IF · INKEY\$="" · THEN · 1210

{EkAu} 1220 · IREN . @nuf\$. @falt\$

{MnAm} 1230 - GOTO - 190 (DuCs) 1240 · '-----

-----{PkAp} 1250-'----END

______ {BwBn} 1270 · CLS: txt\$="Are · you · sure · (Y/N)" : PRINT · txt\$ (D.iB1) 1280 - GOSUB - 1050 : IF - LOWER\$ (a\$) () "y" - THEN - 190

FREE

SOFTWARE

What are all these funny codes and dots?

The four-character codes in the curly brackets { } in front of each line are there to help you type in the listings correctly. They're designed to be used in conjunction with the Typerighter program we print periodically in Type-ins. (It's also been on the covertape a couple of times.)

You RUN Typerighter, then start typing as normal. With each line you type, Typerighter generates a four-digit code you can check against the one printed in the magazine. If it doesn't agree, you know you've done something wrong!

If you haven't got a copy of Typerighter, ignore the codes altogether. Be warned, though - it's

virtually impossible to type in a listing of any length without making a mistake somewhere, and they can be the very devil to track down later.

As for the dots in the lines themselves, they're there to indicate spaces. If the programmer has put in loads of spaces, for example to centre a message on the screen, it can be almost impossible to count them correctly - and if you don't, Typerighter may generate a different code to the one printed. The number of spaces won't make any difference to the way the program works, but it may make you think you've done something else wrong!

So remember, replace all the dots with spaces.

Amstrad Repairs

If something is wrong with your Amstrad CPC or PCW, who better to turn to than the National Repair Centre.

For all repairs to your computer, one low payment covers diagnosis, repair (including parts and labour) and delivery back to you.

And, as a special bonus, you can receive a free piece of software if you contact us before 15th September 1991

The experience and expertise of our technicians ensures that your computer is repaired to the highest standard at the lowest cost. And each repair will be carried out within 12 working days!

To schedule a repair and claim your free software, simply call Michelle or Audrey on 0733 391234.

Please be ready to give your name, address, computer type, serial number and the type of fault.

The costs are:

CPC 464 - £57.45

CPC 6128 - £57.45 PCW 8256 - £85.00

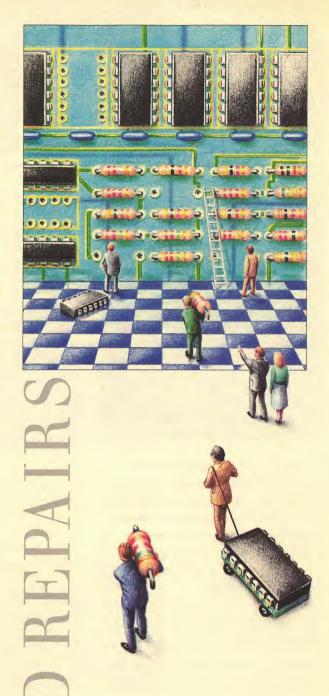
PCW 8512 - £86.00 PCW 9512 - £115.00

All prices are inclusive of VAT, and payment can be made by cheque, postal order or credit card.

And remember, if you call before 15th September 1991, you can claim a FREI piece of software

The National Repair Centre 0733 391234

FMG House Newcombe Way, Orton Southgate Peterborough PE2 0SF



ONE PRICE COVERS ALL PARTS AND **LABOUR**

Wanted: All keypress pokes, cheats, pokes, maps.

Help offered for Protext ROMDOS, machine code etc.

Wanted: 13-14 year-old penpal with 464 cassette inter-

Will swap my Bloodwych (disk) for Bard's Tale (disk).

Has anyone got a poke for Gryzor on tape (budget ver-

sion)? I have a few pokes to swap and lots of AA

Type-ins. I am also looking for a male penpal (not to

swap games) with a CPC464 12-14 yrs old. Anybody

who runs a tape-based PD library, please get in touch.

Please could anyone help me with tape loading for the

CPC6128? If help given and I load, for your help you

Wayne, 071 700 0715 Mon-Fri after 4pm, weekends

Russel, 0886 32710 Mon-Fri 6-7pm

Help wanted for ROM programming

Sam. 09603 78530

Mark, 02656 5-6pm

Derek, 0352 720525

Mark 0795 661157

will be rewarded with games.

Help! Has anyone got a map showing

where all 30 gold coins are in Fantasy

and Treasure Island Dizzy? Also,

will anyone swap Pro Ski Sim or

Thunderbirds for Rick Dangerous

Gemini Wing for Codemasters'

Bigfoot or swap Grandslam's

I have Ballcrazy, Formula One

Simulator, Galletron, Jackle &

Strike, Rick Dangerous 2, AA

covertage (Puzznic, Lost Caves,

Space Froggy) and AA Action Packs 1-3

All on tape. Would anybody like them

(because I only have a disk drive)? Will

swap or sell. Also I have 27 magazines inc

Computing with the Amstrad, ACU & AA. Not for sale

but am willing to photocopy any information from them for people. Also have April 1991 – Computer Shopper

Has anyone out there got X-Out or Turrican on tape to

Wanted: Crazy Cars II, Western Games, Basket Master,

Super Monaco GP, Man Utd, Kick Off 2, Italy '90, World

Cup '90, Emlyn Hughes Int Soccer and Golden Axe.

Help wanted on Rick Dangerous and Ghostbusters II

Prepared to pay £4 or under for the games above. All

Oki-mate 20. I have this printer without the manual.

ics etc? Any information welcome!

William, 0896 831278 5-7pm

Can anyone advise me on codes for alternate fonts, ital-

Wanted: Bloodwych, Rick Dangerous, Rainbow Island

and The Dizzy Collection. Will swap for games such as

Chase HQ, We are the Champions, Sim City, Batman -

the Movie, Ghostbusters 2, Indiana Jones & the Last

Crusade plus many others or buy for reasonable price.

swap. My games are WEC Le Mans, Last Ninja 2,

Rainbow Islands, Your game must not be pirated!

Afterburner, Double Dragon, Iron Man, Turtles,

Wide, Masterclass, Stormbringer,

2 (tape/464)? Ian, 0203 349247 5-8pm

up for grabs.

Heather, 0273 422603

Michael, 081 394 0083

Paul, 0472 210242

Stewart, 0924 402124

ested in swapping games

Feeling helpful? Just send your name, address, phone number (say if you don't want it printed) and subjects on which you're offering help to: Helpline, Amstrad Action, Beauford Court. 30 Monmouth Street. Bath. Avon BA1 2AP. Please write on a postcard or the back of a stuck down envelope and keep it short or you won't get in (or you'll get cut to 'loadsagames').

If you want help contact the appropriate Helpliner - not us. By post include a selfaddressed, stamped envelope for the reply – or you won't get one. And phone only in decent hours!

Piracy is not welcome: don't try it, you'll get booted off. Keep it legal. And if you receive SAE's, for heaven's sake return them with some acknowledgement. Finally, if you want to come off Helpline just write in and say so.

• Due to the huge response for the Helpline page, we're having to cut down on the size of individual entries. So from now on, please quote only your first name and a phone no. That way, you'll be more likely to get in...

Wanted: Hostages on tape for 464. I will swap Shadow of the Beast or Narc, both brand new Stephen, 0782 750995

Wanted: Hard Drivin' and Turrican for Amstrad 464 tape. Will swap for other game (list for selection) also penpal to swap games, pokes and cheats, age 11-14. Dave, 0270 872217 after 5pm

Wanted: 64K memory upgrad and 2nd disk drive. Swap for Epson MX80 printer – untested, but boots-up. All buttons work.

Wayne, 0532 572154

Does anyone know of any companies which sell a PCB designer program, or even any PD libraries with some good PCB designers? I have tried one PD program, and it didn't work properly. But what do you expect for free! Also, Little Computer People wanted on disk Keith, 0384 67712

University/polytechnic contanct wanted by 18 year old male hopefully entering university in October. Paul 0304 812342

Desperately wanted: The Double, Lords of Midnight, Myth & Italy 1990 or World Soccer (disk or tape). Will swap for Sim City, Rick Dangerous & many more. Any war games wanted & Multiface pokes for Elite (tape, original version) that work, unlike those in AA53! James, 0202 422429

Help! Does anyone want to swap a Multiface 2 for an AMX Mouse, interface, graphics package, that's fully boxed with a manual? Cost £60 new. Also, can anyone help me? I can't get past the octopus in NZ Story. James, 08403 710 after 4pm

Does anyone have Lords of Chaos on disk that they are willing to swap for Dominator on disk? I am desperate! David, 0475 705039

Does anyone want to swap anything for some magazines? I have 19 CWTAs from Aug '86 to Dec '88, 7 ACUs from 1989, 7 WACCIs from issue 41 to 47, and all A As from issue 49 onwards. Will consider software firmware or hardware!

Wanted: Rock & Wrestle cassette for CPC464 in exchange for Double Dragon II, Manchester United, Kick Off II. or Gazza's Super Star Soccer. Richard, 021 358 2517

Wanted: Amstrad Action (issues 1-66). Will swap vgc Spectrum +2 with games. Ferguson, 0942 38056

Will swap Atom Ant and Turbo Kart Racer for Fantasy Land Dizzy, all on 464 cassette. Derek, 0292 311333

Help! I urgently need an Amstrad SSA1 speech manual. I have a 464. Has anyone got Jack the Nipper on cassette? I will swap for Collapse and Zub. Also, any tips for Elite Lee, 0363 2491

Have got Tengen Trilogy, Total Eclipse, Football Manager 2 Expansion Kit and Night Raider (tape – all never played) and 4th Dimension disk (never played). Any one for three budgets. Best offer gets them (would love Dizzy in original box). Simon, 05242 71938 outside school hours

I need help with a program. A friend of mine has got a computer program called Autoroute Plus (C). His computer is Akhter Student PC 286. I know it is

bigger than the 6128 that I am using, but is there a program that does the same job? Has anybody got Karnov and UN Squadron on disk? I have got tape games to swap for them. Mike. 0623 846017

help, tips or penpals, or offering any of the Help! I need spring for printabove. No money is to change hands, OK? head of my DMP2000! This page is for free help only. If you send in Ben, 0457 862023

an entry asking for money for your services Wanted: back issues of AA. you're wasting your time and a stamp - it'll Laser Squad (disk), X-Out, F-16 Combat Pilot (disk). Michael, 02575 5566

for £5 and you could go in Wanted: Powerdrift and Classic Collection, tape or disk. I am willing to swap for 10 Great Games II, Revolution, Bouderdash IV (Construction Kit) and

Dizzv II. Craig. 0294 54576

OI!

Helpline is for readers wanting

be straight in the bin. On the

other hand, send in a cheque

Has anyone out there got F-16 Combat Pilot to swap for Tempest, Turtles, Space Ace, Gregory loses his Clock and Through the Trap Door. Also willing to buy Panic Dizzy, as it's not out in Shrewsbury. Also to swap: Shogun for Op Thunderbolt? Also, I would like to ask anyone about my printer (an Amstrad DMP2000). It always prints everything twice, and leaves a line between each row of print. AAAArrrrgggghhh! Adrian, 0743 236914

Has anyone got an original copy of Disk B for Fleet Street Editor? Needed urgently, will buy for sensible price or has anyone got the whole program that they want to sell for under £15? Matthew, 0843 64034

I want to get a first disk drive for the Amstrad 464. Has anybody got one to swap for games or a reasonable price paid Mick, 0623 846017

Badly need help with HTBA Complete B! Will swap AAs (with covertapes) for Laser Squad (disk) and Chase HQ (disk) for Multiface 2, Ninja Turtles (disk) and Viz (disk)

James, 0727 52619 after 6pm



PRINCE OF PERSIA Domark

Rescue a beautiful princess from the clutches of the evil Grand Vizier in this epic arcade adventure. Fantastic graphics!

Description	Price	Order No
Prince of P Cass	£7.99	AA644AC
Prince of P Disk	£11.99	AA644AD

3D CONSTRUCTION KIT Domark



Based on Incentive's ground-breaking Freescape techniques, this program will let you construct your own three-dimensional world!

Description	Price	Order No
3D C. KIT Cass	£19.99	AA646AC
3D C. KIT Disk	£19.99	AA646AD



STOP PRESS & MOUSE Database Software



If you're serious about DTP then consider no other. Powerful features and a superb mouse make it excellent value for money.

FUN SCHOOL 3 Database Software

Bumper packages of educational software for infant and primary school

children. The complete suite of six programs. Teddy Bear Under 5's

T. Bear Cass £9.99 AA632AC Frog Disk £11.99 AA633AD

T. Bear5 Disk £11.99 AA632AD Robot Cass £9.99 AA634AC

Frog Cass £9.99 AA633AC Robot Disk £11.99 AA634AD

Order No

Expiry date

Description Price Order No Description Price

Description	Price	Order No
S/P & Mouse	£64.95	AA606



Re-live the epic battles and strategies of the American Civil War in this Mastergame from one of France's leading software house.

Description	Price	Order No	
N & South Cass	£7.99		
N & South Disc	£10.99	AA636AD	

TURRICAN 2 Rainbow Arts



The original Turrican was one of the best shoot-em-ups of 1990. Turrican 2 is even better. A huge playing area, more monsters than ever and an incredible arsenal of weaponry - it's stunning.

Description	Price	Order No
Turrican 2 Cass	£7.99	AA647AC
Turrican 9 Disc	£10 00	AAAATAD

SPORTS SEND CHEQUE for £14.99 made payable to PDQ Distribution Ltd along with this voucher to: EPYX WORLD OF SPORTS.

SEND EPYX WORLD OF

CARTRIDG

cartridge version of PANG AND

NAVY SEALS

AND £10.00 of the

cartridge version of

EPYX World of sports.

SPECIAL OFFER. UNITS 2/3 HOLFORD WAY. HOLFORD, BIRMINGHAM **B6 7AX.**

OFFER VALID UNTIL 30th SEPTEMBER 1991

FOR PANG SEND A CHEQUE for £19.50 made payable to OCEAN SOFTWARE Ltd along with this voucher to:

AMSTRAD ACTION OFFER. OCEAN SOFTWARE, 6 CENTRAL STREET, MANCHESTER M2 5NS

OFFER VALID UNTIL 30th SEPTEMBER 1991

FOR NAVY SEALS **SEND A CHEQUE for** £19.50 made payable to OCEAN SOFTWARE Ltd along with this voucher to:

AMSTRAD ACTION OFFER, OCEAN SOFTWARE, 6 CENTRAL STREET, MANCHESTER M2 5NS

OFFER VALID UNTIL 30th SEPTEMBER 1991

THE LATEST AND **GREATEST PRODUCTS** AT THE BEST **POSSIBLE PRICE**

Frog 5-7 years / Robot Over 7

SEE OUR **AMAZING** SUBSCRIPTION OFFER OF FREE SOFTWARE ON PAGE 52

Prices include POSTAGE, packing and VAT NO HIDDEN EXTRAS

AMSTRAD ACTION MAIL ORDER

Future Publishing Limited

Name	Description	Price	Order No
Address			
Postcode			
Phone number			
Method of payment (please circle) Access	• Visa • Cheque • PO TOTAL ORDER		For overseas orders call Claire Bates for prices on 0458 74011

SEND THIS FORM TO: Amstrad Action, Future Publishing Ltd. Freepost, Somerton, Somerset, TA11 7BR

Please make all cheques payable to No stamp required if posted in the UK, Channel Islands or the Isle of Man

AMSTRAD ACTION September 1991



AAfterthought

They're all off!

beginning with

for me

Am:

t must be summer madness, or something, but scant weeks since the departure of Adam onto the new public domain magazine, Frankie (hoots mon) O'Connor is off to swell the ranks of another mag. It's outrageous! How could we ever replace Frank? (Have you seen the price of cabbages lately?) Ah, it's a sad, sad day...

Frank O'Connor: an obituary

Here, wait a minute, is anyone around? No. Good. Listen readers, I have to tell you the truth about working at Amstrad Action. I know we've been saying all along that it's a dreamy place to work, all chrome and smoked glass. The fact is, it's nothing like that at all. In fact, Amstrad Action is located in the cellar area of Future Publishing. It's damp, smelly and very dangerous. The only thing I have down here to keep me company, is the mouldering skeleton of the last Staffer, James Leach.

I've had enough. I spotted a weak bit of cement in the cellar wall the other day and I've been hacking away at it with a lolly stick for a solid forty-eight hours. I've made a breakthrough and I'm going to escape now. I thought I had better tell you

the truth about Rod before it's too late. Rod Lawton is not the fluffy, amiable

editor you all believe him to be. He is in fact a twisted space fiend from the planet Zog. His plan for world domination is almost complete. All he needs to finish building his superweapon, is a tesco bag, a bit of hairy string and a double joystick

He keeps me here, locked up all day and night. I have to do the whole magazine by myself and I'm not allowed to sleep. The only thing I get to eat, is a packet of Parma Violets and a piece of cheese. He doesn't know I'm doing this the mag goes off to the printers in a couple of minutes, so he won't find out.

Later dudes, I'm outa here...

8. What do you like most and then

find this month's [main

least about this issue?

feature]?.

And I least like

trank

Your honest opinion of AMSTRAD ACTION

■ To help us keep improving your 7. Out of ten, how useful did you favourite magazine, please fill in I and return this form each month

1. How did you buy this issue?

☐ I subscribe☐ Newsagent delivered it to my home Asked newsagent to reserve copy ■ Bought it on planned shop visit ■ Just happened to see it and liked it

2. Rate AMSTRAD ACTION in terms of value for money: ☐ Excellent! ☐ Good

Reasonable ☐ Poor ☐ Ripoff!

3. Out of ten, how much did this month's cover make you want to look inside?.

4. How much does this issue appeal to you overall?..... 5. How does it compare with

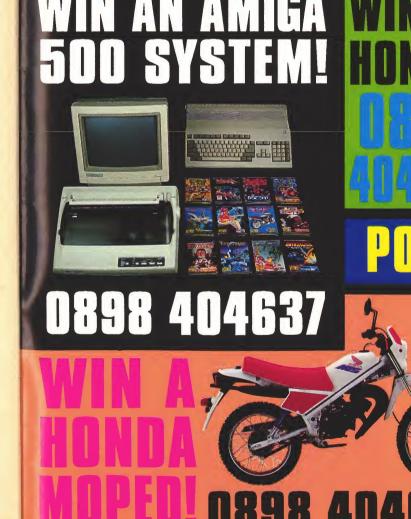
previous issues you've seen? ☐ Much better! ☐ Slightly better About the same standard ☐ Slightly worse Much worse

6. Rate out of ten this and any I other computer magazines you read regularly:

Your name and address:*

Leave blank if you wish - but we may want to send you details of exclusive

■ No stamp needed if posted in UK. Return to: **AMSTRAD ACTION** ./10 September Survey, Future Publishing, ./10 Freepost, Bath, Avon BA1 2XF



THIS BRILLIANT SYSTEM INCLUDES 2 TECHNICS DECKS, MIXER, CD PLAYER, CASSETTE DECK MICROPHONE AND EVEN MORE! SO CALL NOW!

Calls cost 34p (cheap rate) and 45p (at all other times) per minute incl VAT. For winners list send SAE to: Populuxe, PO Box 2065, London, W12 9JH. Average call length is 5.5 minutes. Calls are more expensive than normal so ask permission before you phone.

RADICAL DRIVING GAME AROUND AS 3 PEOPLE CAN

PLAY AT THE SAME TIME! PLUS, WITH 14 DIFFERENT

FROM. THERE'S ALWAYS A

NEW CHALLENGE! BUT THE

BEST THING ABOUT THIS

GIVING IT AWAY! SO PUT

SEAT AND CALL NOW!

MACHINE IS THAT WE ARE

YOURSELF IN THE DRIVING

CIRCUITS TO CHOOSE

DON